

L1HS2 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Saturday, February 08, 2003 3:47 PM

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Majority      -ACCAAATATCTGGACACTTTCTGGCCAGTCATTTTACATTTGAC-----
              +-----+-----+-----+-----+-----+
              10      20      30      40      50
              +-----+-----+-----+-----+
2 genbank empty -ACCAAATATCTGGACACTTTCTGGCCAGTCATTTTACATTTGAC----- 46
2 chimp        -ACCAAATATCTGGACACTTTCTGGCCAGTCATTTTACATTTGAC----- 46
2 gmk         -ACCAAATATCTGGACACTTTCTGGCCAGTCATTTTACATTTGAC----- 46
2 omk         TACCAAATATCTGGACACTTTCTGGCCAGTCATTTTACATTTGACTATAAATT 55

Majority      -----ATGTAAAATTAACCACTGCTGACTTC
              +-----+-----+-----+-----+
              60      70      80      90
              +-----+-----+-----+-----+
2 genbank empty -----ATGTAAAATTAACCACTGCTGACTTC 72
2 chimp        -----ATGTAAAATTAACCACTGCTGACTTC 72
2 gmk         -----ATGTAAAATTAACCACTGCTGACTTC 72
2 omk         AACCACCAATTTGATGTAAAATTAACCACTGCTGACTTC 94
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L1HS24 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Friday, February 07, 2003 12:07 PM

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Majority      GTGTATTTTGCCTTTGAACCAAGTAAATCAAAGAACTATTCAAAAAAACAATAAAATGAGATAAAATCTACTA
              +-----+-----+-----+-----+-----+-----+-----+
              10      20      30      40      50      60      70
              +-----+-----+-----+-----+-----+-----+-----+
24 human empty GTGTATTTTGCCTTTGAACCAAGTAAATCAAAGAACTATTCAAAAAAACAATAAAATGAGATAAAATCTACTA 75
24 HeLa empty  GTGTATTTTGCCTTTGAACCAAGTAAATCAAAGAACTATTCAAAAAAACAATAAAATGAGATAAAATCTACTA 75
24 gor         GTGTATTTTGCCTTTGAACCAAGTAAATCAAAGAACTATTCAAAAAAACAATAAAATGAAATAAAATCTACTA 75
24 orang      GTGTATTTTGCCTTTGAACCAAGTAAATCAAAGAACTATTCAAAAAAACAATAAAATGAAATAAAATCTACTA 75
24 omk        GTGTATTTTGCCTTTGAACCAAGTAACTCAAAGAACTATTCAAAAAAACAATCAAAT-----CTACTA 65

Majority      AAAATCAAGTGAACAAGTTTTTG
              +-----+-----+-----+
              80      90
              +-----+-----+-----+
24 human empty AAAATCAAGTGAACAAGTTTTTG 99
24 HeLa empty  AAAATCAAGTGAACAAGTTTTTG 99
24 gor         AAAATCAAGTGAACAAGTTTTTG 99
24 orang      AAAATCAAGTGAACAAGTTTTTG 99
24 omk        AAAATCAAGTGAACAAGTTTTTG 89
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L1HS45 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Friday, February 07, 2003 12:44 PM

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Majority      AATAGGCCAGCTATTAGATTTAGCAGAGACTTCAAAGTAGCTGTTAAAAAATA
              +-----+-----+-----+-----+-----+
              10      20      30      40      50
              +-----+-----+-----+-----+
45 human filled site AATAGGCCAGCTATTAGATTTAGCAGAGACTTCAAATAGCTGTTAAAAAATA 55
45 chimp        AATAGGCCAGCTATTAGATTTAGCAGAGACTTCAAATAGCTGTTAAAAAATA 55
45 orang      AATAGGCCAGCTATTAGATTTAGCAGAGACTTCAAAGTAGCTGTTAAAAAATA 53
45 omk        AATAGGCCAGCTATTAGATTTAGCAGAAACTTCAAAGCAGCTGTTAAAAA--TA 53

Majority      TG-----
              +-----+-----+-----+-----+-----+
              60      70      80      90      100     110
              +-----+-----+-----+-----+-----+
45 human filled site TG----- 57
45 chimp        TG----- 57
45 orang      TG----- 55
45 omk        TGAATATCTCATCTGATCTTGAAGCTAAGCAGGGTCAGGCCTGGTTAGTACTTG 108

Majority      -----
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-----+-----+-----+-----+-----+-----
              120      130      140      150      160
-----+-----+-----+-----+-----+-----
45 human filled site -----GGAAGGGGAATATCA      72
45 chimp -----      57
45 orang -----      55
45 omk GATGGGAGACCACCTGGGAATATTGGGTGCTGTAGACTTT-----      148

Majority -----
              170      180      190      200      210      220
-----+-----+-----+-----+-----+-----+-----
45 human filled site CACTCTGGGACTGTGGTGGGGTCGGGGGAGGGGGAGGGATAGCATTGGGAGAT      127
45 chimp -----      57
45 orang -----      55
45 omk -----      148

Majority -----
              230      240      250      260      270
-----+-----+-----+-----+-----+-----+-----
45 human filled site ATACCTAATGCTAGATGACACATTAGTGGGTGCAGCGCACCAGCATGGCACATGT      182
45 chimp -----      57
45 orang -----      55
45 omk -----      148

Majority -----
              280      290      300      310      320      330
-----+-----+-----+-----+-----+-----+-----
45 human filled site ATACATATGTAACCTAACCTGCNCAATGTGCACATGTACCCTAAAACCTAGAGTAT      237
45 chimp -----      57
45 orang -----      55
45 omk -----      148

Majority -----AAAATA-A-ATATATAT-ATATATATATATAT-ATGATT-----
              340      350      360      370      380
-----+-----+-----+-----+-----+-----+-----
45 human filled site AATAAAAAAAAAAAAAAAAAATATATATATATAT-ATATATATATATAT-ATGATT      289
45 chimp -----ATT      60
45 orang -----ATT      58
45 omk -----AAAATACAGATATATATATATATATATATATATGAATGATT      188

Majority -----AAAACTTAAAAGAAATCGTGTCAAAGGTTTAAAG-----
              390      400      410      420
-----+-----+-----+-----+-----+-----

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L1HS61alignment

Alignment Report of 'Untitled' - ClustalW (Weighted) : Friday, February 07, 2003 1:09 PM

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Majority ACGTTTGTGCTTCACCTAAGTTCTTGAAGCACAGTCAACTCAACCACTGAATAA
-----+-----+-----+-----+-----+-----
              10      20      30      40      50
-----+-----+-----+-----+-----+-----
61 human filled site ACGTTTGTGCTTCACCTAAGTTCTTGAAGCACAGTCAACTCAACCACTGAATAA      55
61 chimp ACGTTTGTGCTTCACCTAAGTTCTTGAAGCACAGTCAACTCAACCACTGAATAA      55
61 orang ACGTTTGTGCTTCACCTAAGTTCTTGAAGCACAGTCAACTCAACCACTGAATAA      55

Majority GCCCAGTGAGCACATTTAAAAAGTCATGAACAATAGATAATGTTTCTCTTAACT
-----+-----+-----+-----+-----+-----+-----
              60      70      80      90      100      110
-----+-----+-----+-----+-----+-----+-----
61 human filled site GCGCCAGTGAGCACATTTAAAAAGTCATGAACAATAGATACTGTTTCTCTTAACT      110
61 chimp GCCCAGTGAGCACATTTAAAAAGTCATGAACAATAGATAATGTTTCTCTTAACT      110
61 orang GCCCAGTGAGCACATTTGAAAAGTCATGAACAATAGATAATGTTTCTCTTAACT      110

Majority CCCAACATTTTCCCTTTTAAAA-----
-----+-----+-----+-----+-----+-----
              120      130      140      150      160
-----+-----+-----+-----+-----+-----

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-----+-----+-----+-----+-----+-----
61 human filled site CCCAACATTTTCCCTTTTAAAAATGTGGTGGGGTCGGGGGAGGGGGAGGGATAGC 165
61 chimp CCCAACATTTTCCCATTTTAAAA----- 132
61 orang CCCAACATTTTCCCTTTTAAAA----- 132

Majority -----
          170      180      190      200      210      220
-----+-----+-----+-----+-----+-----
61 human filled site ATTGGGAGATATACCTAATGCTAGATGACACATTAGTGGGTGCAGCGCACCAGCA 220
61 chimp ----- 132
61 orang ----- 132

Majority -----
          230      240      250      260      270
-----+-----+-----+-----+-----+-----
61 human filled site TGGCACATGTATACATATGTAACCTGACAAATGTGCACATGTACCCTAAAA 275
61 chimp ----- 132
61 orang ----- 132

Majority -----CTATTTGAGTGCCAAGCACAGTGGCTC
          280      290      300      310      320      330
-----+-----+-----+-----+-----+-----
61 human filled site CTTAGAGTATAATAAAAAAAAAAAAAAAAAACTATTTGAGTGCCAAGCACAGTGGCTC 330
61 chimp -----CTATTTGAGTGCCAAGCACAGTGGCTC 159
61 orang -----CTATTTGAGTGCCAAGCACAGTGGCTC 159

Majority ACAACTATAATCCCGTATTTTG
          340      350
-----+-----+-----
61 human filled site ACAACTATAATCCCGTATTTTG 353
61 chimp ACAACTATAATCCCGTATTTTG 182
61 orang ACAACTATAATCCCGTATTTTG 182

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L1HS62 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Friday, February 07, 2003 1:25 PM

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Majority ATTAAAAGGAATGGACATGCAACACCAAGAATGAAGCTCATAATAATTATGCTGA
          10      20      30      40      50
-----+-----+-----+-----+-----+-----
62 human empty site ATTAAAAGGAATGGACATGCAACACCAAGAATGAAGCTCATAATAATTATGCTGA 55
62 gor ATTAAAAGGAATGGACATGCAACACCAAGAATGAAGCTCATAATAATTATGCTGA 55
62 gmk ATTAAAAGGAATGGACTTGCAACACCAAAAATGAAGCTCATAATAATTATGCTGA 55
62 omk ATTAAAAGGAATGGACATGCAACACTAAGAATGAAGCTCTTAATAATTATGCAGA 55

Majority GTAAAATAAACAGTGTGTATATATTATCCATTTATACAAAACCTCTGGAAAATAT
          60      70      80      90      100      110
-----+-----+-----+-----+-----+-----
62 human empty site GTAAAATAAACAGTGTAT-----CTGGAAAATAT 85
62 gor GTAAAATAAACAGTGTATATATATTATCCATTTATACAAAACCTCTGGAAAATAT 110
62 gmk GTAAAATAAACAGTGTGTATATATTATCCATTCATAACAAAACCTCTGGAAAATAT 110
62 omk ATAAAAGAAGGCAGTGTGTATATATTATCCACTTATACAAAACCTCTGGAAAATAT 110

Majority AAATAATCTATAGTGACATAAAGCAAATCAGTGGTTGCTTGGGGATGGAGGTGG
          120      130      140      150      160
-----+-----+-----+-----+-----+-----
62 human empty site AAATAATCTACAGTAACATAAAGCAAATCAGTGGTTGCTTGGGGATGGAGGTGG 140
62 gor AAATAATCTACAGTAACATAAAGCAAATCAGTGGTTGCTTGGGGATGGAGGTGG 165
62 gmk AAACCAATTTATAGTGACATAAAGCAAATCGGTGTTTCTTGGGGATGGAGGTGG 165
62 omk AAACAAATCTATAGTGACAGGAAGCAAATCAGTGGTTGCTTGGGGATGAAGGTGG 165

Majority GACTGACATGGGAGGTCAGGAGAGAGATGACAAAGGAGTG
          170      180      190      200
-----+-----+-----+-----+-----

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		120	130	140	150	160	
86 genbank empty site	TAATCCCAGTACTTTGGGAGGCTGAGGCAGGCTGATCTCGAGGTCAGGAGATCGA						154
86 bonobo	TAATCCCAGTACTTTGGGAGGCTGAGGCAGGCTGATCTCGAGGTCAGGAGATCGA						154
86 orang	TAATCCCAGTACTTTGGGAGGCTGAGGCAGGCTG--CTCGAGGTCAGGAGATCGA						152
86 gmk	-----						85
Majority	GACCATCCTGGCTAACACAGTGAAACCCCGTCTGTACTAAAAATACAATAAATTA						
		170	180	190	200	210	220
86 genbank empty site	GACCATCCTGGCTAACACAGTGAAACCCCGTCTGTACTAAAAATACAATAAATTA						209
86 bonobo	GACCATCCTGGCTAACACAGTGAAACCCCGTCTGTACTAAAAATACAATAAATTA						209
86 orang	GACCATCCTGGCTAACACAGTGAAACCCCATCTCTACTAAAAATACAAAAAATTA						207
86 gmk	-----						85
Majority	GCCAGGCGTGGTGGCGAACGCCTGTAGTCCCAGCTACTCGGAAGGCTGAGATAGG						
		230	240	250	260	270	
86 genbank empty site	GCCAGGCGTGGTGGCGAACGCCTGTAGTCCCAGCTACTCGGAAGGCTGAGATAGG						264
86 bonobo	GCCAGGCGTGGTGACAAATGCCTGTAGTCCCAGCTACTCGGAAGGCTGAGATAGG						264
86 orang	GCCAGGCATGGTGGCGAGCGCCTGTAGTCCCAGCTACTCAGAAGGCTGAGATAGG						262
86 gmk	-----						85
Majority	AGAATGGCGTGAACCCAGGAGGCAGAGATTGCAGTGAGCCGAGATAGTGC-CGCT						
		280	290	300	310	320	330
86 genbank empty site	AGAATGGCGTGAACCCAGGAGGCAGAGATTGCAGTGAGCCGAGATAGTGC-CGCT						318
86 bonobo	AGAATGGCGTGAACCCAGGAGGCGGAGATTGCAGTGAGCCGAGATAGTGC-CGCT						318
86 orang	AGAATGGCGTGAACCCAGGAGGCAGAGATTGCAGTGAGCCGAGATAGTGC-CGCT						316
86 gmk	-----						85
Majority	GCACTCCAGC--CTGGGAGACAGAGCGAAACTCCGTCTCAAAAAAAAAAAAAAAAA						
		340	350	360	370	380	
86 genbank empty site	GCACTCCAGC--CTGGGAGACAGAGCGAAACTCCGTCTCAAAAAAAAAAAAAAAAA						371
86 bonobo	GCACTCCAGC--CTGGGAGACAGAGCGAAACTCCGTCTCAAAAAAAAAAAAAAAAA						370
86 orang	GCACTCCAGC--CTGGGAGACAGAGCGAAACTCCGTCTCCNAAAAAAAAAAAAAAAA						369
86 gmk	-----						85
Majority	GAAAGAAAGAAAGAAAAGAAACTTCACATGGGGCCACATGTCTAATAAAGGTGA						
		390	400	410	420	430	440
86 genbank empty site	GAAAGAAAGAAAGAAAAGAAACTTCACATGGGGCCACATGTCTAATAAAGGTGA						426
86 bonobo	GAAAGAAAGAAAGAAAAGAAACTTCACATGGGGCCACATGTCTAATAAAGGTGA						425
86 orang	AAAAAAAAAGAAATACCAAGAAACTTCACATGGGGCCACATGTCTAATAAAGGTGA						424
86 gmk	-----ACATGGGGCCGCATGTCTAATAAAGATGA						114
Majority	CTGAATCCCAAATTTATATTGGTAACATGG-AAATTCCTGATAGGGGAAGAATAT						
		450	460	470	480	490	
86 genbank empty site	CTGAATCCCAAATTTATATTGGTAACATGG-AAATTCCTGATAGGGGAAGAATAT						480
86 bonobo	CTGAATCCCAAATTTATATTGGTAACATGG-AAATTCCTGATAGGGGAAGAATAT						479
86 orang	CTGAATCCCAAATTTATATTGGTAACATGGAAATTCCTGATAGGGGAAGAATAT						479
86 gmk	CTGAATCCCAAATTTATATNGGTAACATGG-AAATTCCTGATAGGGGAAGAATAT						168
Majority	TCC						

86 genbank empty site	TCC						483
86 bonobo	TCC						482
86 orang	TCC						482
86 gmk	TCC						171

L1HS86 Alu alignment

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Majority      -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG
-----+-----+-----+-----+-----+-----+-----+
          10          20          30          40          50
-----+-----+-----+-----+-----+
AluSc         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluSg         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluSp         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluSq         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluSx         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluY          -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluYc         -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluYc3        -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluYc5        -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluYb8        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluYa8        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
AluYa5        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG      45
86genbankAluY AAGAAACTTCCACCGGGCGCGGTGGCTCACACCTGTAATCCCAGTACTTTGGGAG      55
86pcAluY      AAGAAACTTCCACCGGGCGCGGTGGCTCACACCTGTAATCCCAGTACTTTGGGAG      55
86oranAluY    AAGAAACTTCCACCGGGTGCCTGGCTCACACCTGTAATCCCAGTACTTTGGGAG      55
    
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Majority      GCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCATCCTGGCTAACAC
-----+-----+-----+-----+-----+-----+
          60          70          80          90          100         110
-----+-----+-----+-----+-----+
AluSc         GCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCATCCTGGCCAACAT      98
AluSg         GCCGAGGCGGGCGGATCAC--GAGGTCAGGAGTTCGAGACCAGCCTGGCCAACAT      98
AluSp         GCCGAGGCGGGCGGATCACCTGAGGTCGGGAGTTCGAGACCAGCCTGACCAACAT     100
AluSq         GCCGAGGCGGGTGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGGCCAACAT     100
AluSx         GCCGAGGCGGGCGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGGCCAACAT     100
AluY          GCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCATCCTGGCTAACAC      98
AluYc         GCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCA-----C--      86
AluYc3        GCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCA-----C--      86
AluYc5        GCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCA-----C--      86
AluYb8        GCCGAGGCGGGTGGATCAT--GAGGTCAGGAGATCGAGACCATCCTGGCTAACAA      98
AluYa8        GCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCATCCCGGCTAAAC      98
AluYa5        GCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCATCCCGGCTAAAC      98
86genbankAluY GCTGAGGCAGGCTGATCTC--GAGGTCAGGAGATCGAGACCATCCTGGCTAACAC     108
86pcAluY      GCTGAGGCAGGCTGATCTC--GAGGTCAGGAGATCGAGACCATCCTGGCTAACAC     108
86oranAluY    GCTGAGGCAGGCTG--CTC--GAGGTCAGGAGATCGAGACCATCCTGGCTAACAC     106
    
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Majority      GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTGGTGGCGGG
-----+-----+-----+-----+-----+
          120         130         140         150         160
-----+-----+-----+-----+
AluSc         GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTGGTGGCGGG     152
AluSg         GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTGGTGGCGGG     152
AluSp         GGAGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTGGTGGCGCA     154
AluSq         GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTGGTGGCGGG     154
AluSx         GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTGGTGGCGGG     154
AluY          GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTGGTGGCGGG     153
AluYc         GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGCGGTGGCGGG     141
AluYc3        GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGCGGTGGCGGG     141
AluYc5        GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGCAGTGGCGGG     141
AluYb8        GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGCAGTGGCGGG     153
AluYa8        GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTAGTGGCGGG     152
AluYa5        GGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTAGTGGCGGG     153
86genbankAluY AGTGAAACCCCGTCTGTACTAAAAATACAATAAATTAGCCAGGCGTGGTGGCGAA     163
86pcAluY      AGTGAAACCCCGTCTGTACTAAAAATACAATAAATTAGCCAGGCGTGGTGGCGAAA     163
86oranAluY    AGTGAAACCCCATCTCTACTAAAAATACAAAAAATTAGCCAGGCATGGTGGCGAG     161
    
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Majority      CGCCTGTAGTCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATGGCGTGAACCCG
-----+-----+-----+-----+-----+
          170         180         190         200         210         220
-----+-----+-----+-----+
AluSc         CGCCTGTAGTCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATCGCTTGAACCCG     206
AluSg         CGCCTGTAAATCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATCGCTTGAACCCG     206
AluSp         TGCCGTAAATCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATCGCTTGAACCCG     208
AluSq         CGCCTGTAAATCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATCGCTTGAACCCG     208
AluSx         CGCCTGTAAATCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATCGCTTGAACCCG     208
AluY          CGCCTGTAGTCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATGGCGTGAACCCG     207
AluYc         CGCCTGTAGTCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATGGCGTGAACCCG     195
AluYc3        CGCCTGTAGTCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATGGCGTGAACCCG     196
AluYc5        CGCCTGTAGTCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATGGCGTGAACCCG     195
AluYb8        CGCCTGTAGTCCCAGTACTCGG-GAGGCTGAGGCAGGAGAATGGCGTGAACCCG     207
    
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AluYa8	CGCCTGTAGTCCAGCTACTTGG-GAGGCTGAGGCAGGAGAATGGCGTGAACCCG	206
AluYa5	CGCCTGTAGTCCAGCTACTTGG-GAGGCTGAGGCAGGAGAATGGCGTGAACCCG	207
86genbankAluY	CGCCTGTAGTCCAGCTACTCGG-AAGGCTGAGATAGGAGAATGGCGTGAACCCA	217
86pcAluY	TGCTGTAGTCCAGCTACTCGG-AAGGCTGAGATAGGAGAATGGCGTGAACCCA	217
86oranAluY	CGCCTGTAGTCCAGCTACTCAG-AAGGCTGAGATAGGAGAATGGCGTGAACCCA	215

Majority	GGAGGCGGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	
	-----+-----+-----+-----+-----+-----+-----+	
	230 240 250 260 270	
	-----+-----+-----+-----+-----+-----+-----+	

AluSc	GGAGGCGGAGGTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	254
AluSg	GGAGGCGGAGGTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	254
AluSp	GGAGGCGGAGGTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	256
AluSq	GGAGGCGGAGGTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	256
AluSx	GGAGGCGGAGGTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	256
AluY	GGAGGCGGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	255
AluYc	GGAGGCGGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	243
AluYc3	GGAGGCGGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	244
AluYc5	GAGGCGGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	243
AluYb8	GGAAGCGGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	262
AluYa8	GGAGGCGGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	254
AluYa5	GGAGGCGGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCA-----GCC	255
86genbankAluY	GGAGGCGAGATTGCAGTGAGCCGAGATAGTGCCGCTGCACTCCA-----GCC	265
86pcAluY	GGAGGCGGAGATTGCAGTGAGCCGAGATAGTGCCGCTGCACTCCA-----GCC	265
86oranAluY	GGAGGCGAGATTGCAGTGAGCCGAGATAGTGCCGCTGCACTCCA-----GCC	263

Majority	TGGGCGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAXXXXXXX	
	-----+-----+-----+-----+-----+-----+-----+	
	280 290 300 310 320 330	
	-----+-----+-----+-----+-----+-----+-----+	

AluSc	TGG-CGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	299
AluSg	TGGGCGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	300
AluSp	TGGGCAACAAGAGCGAAACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	303
AluSq	TGGGCAACAAGAGCGAAACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	303
AluSx	TGGGCGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	302
AluY	TGGGCGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	301
AluYc	TGGGCGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	297
AluYc3	TGGGCGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	298
AluYc5	TGGGCGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	297
AluYb8	TGGGCGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	308
AluYa8	TGGGCGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	300
AluYa5	TGGGCGACA-GAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAA	301
86genbankAluY	TGGGAGACA-GAGCGAAACTCCGTCTCAAAAAAAAAAAAAAAAAAGAAAGAAA	319
86pcAluY	TGGGAGACA-GAGCGAAACTCCGTCTCAAAAAAAAAAAAAAAAAAGAAAGAAA	318
86oranAluY	TGGGAGACA-GAGCGAAACTCCGTCTCCNAAAAAAAAAAAAAAAAAGAAA	317

Majority	XXXXXXXXXXXXXX	
	-----+-----	
	340	
	-----+-----	

AluSc		299
AluSg		300
AluSp		303
AluSq		303
AluSx		302
AluY		301
AluYc	AA	299
AluYc3	AA	300
AluYc5	AA	299
AluYb8		308
AluYa8		300
AluYa5		301
86genbankAluY	GAAAAAGAACTTC	333
86pcAluY	GAAAAAGAACTTC	332
86oranAluY	TACCAAGAACTTC	331

L1HS135 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Friday, February 07, 2003 3:00 PM

Majority	TTTTTGAAGGGAGTACAGTAATAGGTATAGATTAGCTGACTGAACACAATTGGTA	
	-----+-----+-----+-----+-----+-----+-----+	

	10	20	30	40	50	
135 genbank empty site	TTTTTGAAGGGAGTACAGTAATAGGTATAGATTAGCTGAGTGAACACAATTGGTA					55
135chimp	TTTTTGAAGGGAGTACAGTAATAGGTATAGATTAGCTGAGTGAACACAATTGGTA					55
135gor	-TTTTGAAGGGAGTACAGTAATAGGTATAGATTAGCTGAGTGAACACAATTGGTA					54
135oran	TTTTTGAAGGGAGTACAGTAATAGGTATAGATTAGCTGAGTGAACACAATTGGTA					55
135 gmK	TTTTTGAAGGGAGTACAGTAATAGGTATAGATTAGCTGAGTGAACACTATTGGTA					55
135 omk	TTTTTGAAGGGAGTACAGTAATAGGTACAGATTAGCTGAGTGAACACTATTGGTA					55
Majority	AAAAGGTATGCAGATGGCCGGGCACGGTGGCTCACGCCTGTAATCCCAGCAATTT					
	60	70	80	90	100	110
135 genbank empty site	AAAAGGTATGCAGATGGCCGGGCATGGTGGCTCACGCCTGTAATCCCAGCAATTT					110
135chimp	AAAAGGTATGCAGATGGCCGGGCACGGTGGCTCACGCCTGTAATCCCAGCAATTT					110
135gor	AAAAGGTATGCAGATGGCCGGGCACGGTGGCTCACGCCTGTAATCCCAGCAATTT					109
135oran	AAAAGGTATGCAGATGNCCGGGCACGGTGGCTCACNCCTGTAATCCCAGCAATTT					110
135 gmK	AAAAGGTGT-----					64
135 omk	AAAAGGTAT-----					64
Majority	GGGAGGCT-AGGTGGCGGATCACAAAGTCAAGGATCGAGACCATCCTGGCTAA					
	120	130	140	150	160	
135 genbank empty site	GGGAGGCCAGGTGGCGGATCACAAAGTCAAGGATCGAGACCATCCTGGCTAA					165
135chimp	GTGATCCT---TGGCGGATCACAAAGTCAAGGATCGAGACCATCCTGGCTAA					161
135gor	GGGAGGCCAGGTGGCGGATCGCAAGTCAAGGATCGAGACCATCCTGGCTAA					164
135oran	GGGAGGCTGAGGTGGCGGATCACAAAGTCAAGGATCGAGACCATCCTGGCTAA					165
135 gmK	-----					64
135 omk	-----					64
Majority	CACGGTGAACCCCTCTCTACTAAAAATACAAAAAATTAGCCGGCGTGGCAGC					
	170	180	190	200	210	220
135 genbank empty site	CACGGTGAACCCCTCTCTACTAAAAATACAAAAAATTAGCCGGCGTGGCAGC					220
135chimp	CACGGTGAACCCCTCTCTACTAAAAATACAAAAAATTAGCCGGCGTGGCAGC					216
135gor	CACGGTGAACCCCTCTCTACTAAAAATACAAAAAATTAGCCGGCGTGGCAGC					219
135oran	CACGGTGAACCCCTCTNTACTAAAAATACAAAAAATTAGCCGGCGTGGCAGC					220
135 gmK	-----					64
135 omk	-----					64
Majority	GTGCACCTGTAGTCTCAGCTACTCGGGAGGCTGAGGCAGGAGGATGGCGTGAACC					
	230	240	250	260	270	
135 genbank empty site	GTGCACCTGTAGTCTCAGCTACTCGGGAGGCTGAGGCAGGAGGATGGCGTGAACC					275
135chimp	GTGCACCTGTAGTCTCAGCTACTCGGGAGGCTGAGGCAGGAGGATGGCATGAACC					271
135gor	GTGCGCCTGTAGTCTCAGCTACTCGGGAGGCTGAGGCAGGAGGATGGCGTGAACC					274
135oran	ATGCACCTGTAGTCTCAGCTACTCGGGAGGCTGAGGCAGGAGGATGGTGTGAACC					275
135 gmK	-----					64
135 omk	-----					64
Majority	CGGGAGGTGGAGCTTGCAGTGAGCCG-----AGACTGTACC					
	280	290	300	310	320	330
135 genbank empty site	TGGGAGGTGGAGCTTGCAGTGAGCCGAGACTGTACCAGTGAGCCGAGACTGTACC					330
135chimp	CGGGAGGTGGAGCTTGCAGTGAGCCG-----AGACTGTACC					307
135gor	CGGGAGGTGGAGCTTGCAGTGAGCCG-----AGACTGTACC					310
135oran	CAGGAGCCGAGCTTGCAGTGAGCCG-----AGACTATACC					311
135 gmK	-----					64
135 omk	-----					64
Majority	ACTGTACTCCAGCCTGGGTGACAGAGCGAGACTCTGTCTCAAAAAAAAAAAAAA					
	340	350	360	370	380	
135 genbank empty site	ACTGTACTCCAGCCTGGGTGACAGAGCGAGACTCTGTCTCAAAAAAAAAAAAAA					385
135chimp	ACTGTACTCCAGTCTGGGTGACAGAGTGAGACTCTGTCTCAAAAAAAAAAAAAA					362
135gor	ACTGTACTCCAGCCTGGGTGACAGAGCGAGACTCTGTCTCAAAGAAAAAAAA---					362
135oran	ACTGTACTCCAGCCTGGGCGACAGAGCGAGACTCTGTCTCAAAAAAAAAAAAAA					366
135 gmK	-----					64
135 omk	-----					64
Majority	AA--A-----GGGTATGCAATAGGAACTATGGAAGGCX					


```

-----+-----+-----+-----+-----
          390         400         410         420
-----+-----+-----+-----+-----
135 genbank empty site AAAAAAAAAAAAAAGGGTATGCAAATAGGAACTATGGAAGGC      427
135chimp              AA--A-----GGGTATGCAAATAGGAACTATGGAAGGC      393
135gor                -----GGATATGCAAATAGGAACTATGGAAGGC      390
135oran              AAAAA-----AGGTATGCAAATAGGAACTATGGAAGGC      399
135 gmk              -----GCAAATAGGAACTATGGAAGGCA      87
135 omk              -----GCAAATAGGAACTATGGAAGGCA      87

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L1HS151 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Friday, February 07, 2003 3:24 PM

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Majority          CTTTGATCAGTTCTTGGAACTAGGAACTGACCAAATCTGGAAAGCC-TGATTCT
-----+-----+-----+-----+-----+-----
                   10         20         30         40         50
-----+-----+-----+-----+-----+-----
151 human filled site CTTTGATCAGTTCTTGGAACTAGGAACTGACCAAATCTGGAAAGCC-TGATTCT      54
151 genbank empty site CTTTGATCAGTTCTTGGAACTAGGAACTGACCAAATCTGGAAAGCC-TGATTCT      54
151 gmk              CTTTGATCAGTTCTTGGAACTAGGAACTGACCAAATCTGGAAAGCCATGATTNT      55
151 omk              CTTTGATCAGTTCTTGGAACTAGGAACTGACCAAATCTGGAAAGCCCTTAATTCT      55

Majority          TCTAAAAATAGAAAATGG-----
-----+-----+-----+-----+-----+-----
                   60         70         80         90        100        110
-----+-----+-----+-----+-----+-----
151 human filled site TCTAAAAATAGAAAATGGGGGAGGGATAGCATTGGGAGATATACCTAATGCTAGA      109
151 genbank empty site TCTAAAAATAGAAAATGG-----                          72
151 gmk              TCTAAAAATAGAAAATGG-----                          73
151 omk              TCTAAAAAT-----GG-----                          66

Majority          -----
-----+-----+-----+-----+-----+-----
                   120        130        140        150        160
-----+-----+-----+-----+-----+-----
151 human filled site TGACACATTAGTGGGTGCAGCGCACCAGCATGGCACATGTATACATATGTAACTA      164
151 genbank empty site -----                          72
151 gmk              -----                          73
151 omk              -----                          66

Majority          -----
-----+-----+-----+-----+-----+-----
                   170        180        190        200        210        220
-----+-----+-----+-----+-----+-----
151 human filled site ACCTGCACAATATGCACATGTACCCTAAAACCTTAGAGTATAATAAAAAAA--AA      217
151 genbank empty site -----                          72
151 gmk              -----                          73
151 omk              -----                          66

Majority          -----GCCGGGCGCGGTGACTCAGGCCTGTAATCCCAG
-----+-----+-----+-----+-----+-----
                   230        240        250        260        270
-----+-----+-----+-----+-----+-----
151 human filled site AAAAAGAAAAAAGAAAATGGGCCGGGCACAGTGACTCAGGCCTGTAATCCCAG      272
151 genbank empty site -----GCCGGGCACAGTGACTCAGGCCTGTAATCCCAG      105
151 gmk              -----GCCGGGCGCGGCAC-CACGCCTGTAATCCCAG      105
151 omk              -----GCTGGGTGTGGTGACTCATGCCTGTAATCCCAG      99

Majority          CACTTGGGAGGCCGAGGCAGGCAGATCACCTGATGTCAGGAGTTTGAGACCAGC
-----+-----+-----+-----+-----+-----
                   280        290        300        310        320        330
-----+-----+-----+-----+-----+-----
151 human filled site CACTTCGGGAGGCCGAGGCAGGCAGATCACCTGATGTCAGGAGTTTGAGACCAGC      327
151 genbank empty site CACTTCGGGAGGCCGAGGCAGGCAGATCACCTGATGTCAGGAGTTTGAGACCAGC      160
151 gmk              CACTTGGGAGGCTAAGGCAGGCAGATCACTTGACGTCAGGAGTTTGAGACCAGC      160
151 omk              CACATTTGGAGGC-----AGGCAGATCACCTGAGGTGAGGAGTTTGAGACCAAC      148

Majority          CTGGCCAACATGGCGAAACCTGTCTCTACTAAAAAA-TACAAAAATTAGCTGGG
-----+-----+-----+-----+-----+-----
                   340        350        360        370        380
-----+-----+-----+-----+-----+-----
151 human filled site CTGGCCAACATGGCGAAACCTGTCTCTACTAAAAAA-TACAAAAATTAGCTGGG      381

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AluSg	-----	0
AluSp	-----	0
AluSq	-----	0
AluSx	-----	0
AluY	-----	0
AluYc	-----	0
AluYc3	-----	0
AluYc5	-----	0
AluYb8	-----	0
AluYa8	-----	0
AluYa5	-----	0
151 human filled site	CTAAAAATAGAAAATGGGGGAGGGATAGCATGGGAGATATACCTAATGCTAGAT	110
151 genbank empty site	-----	0
151 gmk	-----	0
151 omk	-----	0

Majority

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-----
+-----+-----+-----+-----+
      120      130      140      150      160
+-----+-----+-----+-----+

```

AluSc	-----	0
AluSg	-----	0
AluSp	-----	0
AluSq	-----	0
AluSx	-----	0
AluY	-----	0
AluYc	-----	0
AluYc3	-----	0
AluYc5	-----	0
AluYb8	-----	0
AluYa8	-----	0
AluYa5	-----	0
151 human filled site	GACACATTAGTGGGTGCAGCGCACCAGCATGGCACATGTATACATATGTAAGTAA	165
151 genbank empty site	-----	0
151 gmk	-----	0
151 omk	-----	0

Majority

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-----
+-----+-----+-----+-----+-----+
      170      180      190      200      210      220
+-----+-----+-----+-----+-----+

```

AluSc	-----	0
AluSg	-----	0
AluSp	-----	0
AluSq	-----	0
AluSx	-----	0
AluY	-----	0
AluYc	-----	0
AluYc3	-----	0
AluYc5	-----	0
AluYb8	-----	0
AluYa8	-----	0
AluYa5	-----	0
151 human filled site	CCTGCACAATATGCACATGTACCCTAAAACCTAGAGTATAATAAAAAAAAA--AAA	218
151 genbank empty site	---CTTTGATCAGTTCTTGGAACTAGGAACTGACCAAAATCTGGAAAGCC-TGAT	51
151 gmk	---CTTTGATCAGTTCTTGGAACTAGGAACTGACCAAAATCTGGAAAGCCATGAT	52
151 omk	---CTTTGATCAGTTCTTGGAACTAGGAAACGGACCAAAATCTGGAAAGCCTTAAT	52

Majority

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-----
-----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC
+-----+-----+-----+-----+
      230      240      250      260      270
+-----+-----+-----+-----+

```

AluSc	-----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluSg	-----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluSp	-----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluSq	-----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluSx	-----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluY	-----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluYc	-----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluYc3	-----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluYc5	-----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluYb8	-----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluYa8	-----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
AluYa5	-----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGC	35
151 human filled site	AAAAGAAAAAAGAAAATGGGCCGGGCACAGTACTCAGGCCTGTAATCCCAGC	273
151 genbank empty site	TCTTCTAAAAATAGAAAATGGGCCGGGCACAGTACTCAGGCCTGTAATCCCAGC	106

155 genbank empty site	ATGGTTTTGGTTTTGTTTTATACTTTTGCTTCTTTTTCCCTTTGAGAATATAAT	110
155 pc	CNGGTTTTGGGTTTTGTTTTATACTTTGGCTTCTTTTTCCCTTTGAGAATATAAT	110
155 gor	GGGNTTGGGGTTNNGTTNAANACTTNGGCTTCTTTTTCCCTGGGAGAATATAAT	110
155 orang	ATAGTTTTGGTTTTGTTTTCTACTTTTGCTTCTTTCTTTCCCTTTGAGAATATAAT	110
155 gmk	ATAGTTTGTGGTTTTGTTTTCCACTTTTGCTTCTTTTTCCCTTTGAGAATATAAT	110

Majority
 -----+-----+-----+-----+-----+
 ATTTTTCCCTTTTTGTCTTCTACATTTATTATTATTATTATTATTATTATT-ATT
 -----+-----+-----+-----+-----+
 120 130 140 150 160
 -----+-----+-----+-----+-----+

155 genbank empty site	ATTTTTCCCTTTTTGTCTTCTACATTTATTATTATTACTTATTTATTTATTATT	165
155 pc	ATTTTTCCCTTTTTGTCTTNTACATTTATTATTATTATTATTATTATTATT-ATT	164
155 gor	ATTTTTCCCTTTTTGTCTTCTACATTTATTATTATTATTATTATTATTATT-ATT	164
155 orang	ATTTTTCCCTTTTTGTCTTCT-----	131
155 gmk	ACTTTTCCCTTTTTGTCTTCT-----	131

Majority
 ---ATACTTTAAGTTTTAGGGTACATGTGCACAATGTGCAGGTTAGTTACATATG
 -----+-----+-----+-----+-----+
 170 180 190 200 210 220
 -----+-----+-----+-----+-----+

155 genbank empty site	ATTATACTTTAAGTTTTAGGGTACATGTGCACAATGTGCAGGTTAGTTACATATG	220
155 pc	ATTATACTTTAAGTTTTAGGGTACATGTGCACAATGTGCAGGTTAGTTACATATG	219
155 gor	---ATACTTTAAGTTTTAGGGTACATGTGCACAATGTGCAGGTTAGTTACATATG	216
155 orang	-----	131
155 gmk	-----	131

Majority
 TATACATGTGCCATGCTGGTGTGCTGCACCCACTAACTCGTCATCTAGCATTAGG
 -----+-----+-----+-----+-----+
 230 240 250 260 270
 -----+-----+-----+-----+-----+

155 genbank empty site	TATACATGTGCCATGCTGGTGTGCTGCACCCACTAACTCATCTAGCATTAGG	275
155 pc	TATACGTGTGCCATGCTGGTGTGCTGCACCCACTAACTCGTCATCTAGCATTAGG	274
155 gor	TATACATGTGCCATGCTGGTGTGCTGCACCCACTAACTTGTCTATCTAGCATTAGG	271
155 orang	-----	131
155 gmk	-----	131

Majority
 TATATCTCCCAGTGTATCCCTCCCCCCT-CCCCCACCCACAACAGTCCCCAGA
 -----+-----+-----+-----+-----+
 280 290 300 310 320 330
 -----+-----+-----+-----+-----+

155 genbank empty site	TATATCTCCCAGTGTATCCCTCCCCCCT-CCCCCACCCACAACAGTCCCCAGA	329
155 pc	TATATCTCCCAATGTATCCCTCCCCCCTTCCCCCACCCACAACAGTCTGAGA	329
155 gor	TATATCTCCCAGTGTATCCCTCCCCCCT-CCCCCACCCACAACAGTCCCCAGA	325
155 orang	-----	131
155 gmk	-----	131

Majority
 GTGTGATGTTCCCTTCCTGTGTCCATGTGTTCTCATTGTTCAATTCCCACCTAT
 -----+-----+-----+-----+-----+
 340 350 360 370 380
 -----+-----+-----+-----+-----+

155 genbank empty site	GTGTGATGTTCCCTTCCTGTGTCCATGTGTTCTCATTGTTCAATTCCCACCTAT	384
155 pc	GTGTGATGTTCCCTTCCTGTGCCATGTGTTCTCATTGTTCAATTCCCACCTAT	384
155 gor	GTGTGATGTTCCCTTCCTGTGTCCATGTGTTCTCATTGTTCAATTCCCACCTAT	380
155 orang	-----	131
155 gmk	-----	131

Majority
 GAGTGAGAATATGCGGTGTTTGGTTTTTTGTTCTTGTGATAGTTTACTGAGAATG
 -----+-----+-----+-----+-----+
 390 400 410 420 430 440
 -----+-----+-----+-----+-----+

155 genbank empty site	GAGTGAGAATATGCGGTGTTTGGTTTTTTGTTCTTGTGATAGTTTACTGAGAATG	439
155 pc	GAGTGAGAATATGCGAGTGTTTGGTTTTTTGTTCTTGTGATAGTTTACTGAGAATG	439
155 gor	GAGTGAGAATATGCGGTGTTTGGTTTTTTGTTCTTGTGATAGTTTACTGAGAATG	435
155 orang	-----	131
155 gmk	-----	131

Majority
 ATGATTTCCAATTTTCATCCATGTCCCTACAAAGGACATGAATTCATCATTTTTTA
 -----+-----+-----+-----+-----+
 450 460 470 480 490
 -----+-----+-----+-----+-----+

155 genbank empty site	ATGATTTCCAATTTTCATCCATGTCCCTACAAAGGACATGAATTCATCATTTTTTA	494
155 pc	ATGATTTCCAATTTTCATCCATGTCCCTACAAAGGACATGAATTCATCATTTTTTG	494
155 gor	ATGATTTCCAATTTTCATCCATGTCCCTACAAAGGACATGAATTCATCATTTTTTA	490
155 orang	-----	131
155 gmk	-----	131

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Majority      TGGCTGCATAGTATTCCATGGTGTGTATGTGCCACATTTTCTTATTTCTCTCATT
-----+-----+-----+-----+-----+-----+
              500      510      520      530      540      550
-----+-----+-----+-----+-----+
155 genbank empty site TGGCTGCATAGTATTCCATGGTGTGTATGTGCCACATTTTCTTATTTCTCTCATT      549
155 pc        TGGCTGCATAGTATTCCATGGTGTATATGTGCCACATTTTCTTATTTCTCTCATT      549
155 gor       TGGCTGCATAGTATTCCATGGTGTGTATGTGCCACATTTTCTTATTTCTCTCATT      545
155 orang     -----ACA-TTTATTATTTTCTCATT      152
155 gmk       -----ACA-TTTATTGTTTCTC-CATT      151

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Majority      TTTAAATTTCTTTACTTTTTGTTGTCGGTCTTTTATTTCTGTTTTCC
-----+-----+-----+-----+
              560      570      580      590
-----+-----+-----+-----+
155 genbank empty site TTTAAATTTCTTTACTTTTTGTTGTCGGTCTTTTATTTCTGTTTTCC      596
155 pc        TTTAAATTTCTTTACTTTTTGTTGTCGGTCTTTTATTTCTGTTTTCC      596
155 gor       TTTAAATTTCTTTACTTTTTGTTGTCGGTCTTTTATTTCTGTTTTCC      592
155 orang     TTTAAATTTCTTTACTTTTTACTGTCCGTCTTTTATTTCTGTTTTCC      199
155 gmk       TTTAAATTTCTTTATTTTTTATTGTCCGTCTTTTATTTCTGTTTTCC      198

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L1HS 195 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Monday, February 10, 2003 10:00 AM

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Majority      GCTTACATCTCAAATTTCTGGTACCTTCTCTCTGCAGTTCAAGAGCTTACATTTTA
-----+-----+-----+-----+-----+
              10      20      30      40      50
-----+-----+-----+-----+-----+
195 genbank empty site GCTTACATCTCAAATTTCTGGTACCTTCTCTCTGCAGTTCAAGAGCTTACATTTTA      55
195 chimp      GCTTACATCTCAAATTTCTGGTACCTTCTCTCTGCAGTTCAAGAGCTTACATTTTA      55
195 pygmy chimp GCTTACNTCTCAAATTTCTGGTACCTTCTCTCTGCAGTTCAAGAGCTTACATTTTA      55
195 gorilla    GCTTACNTCTCAAATTTCTGGTACCTTCTCTCTGCAGTTCAAGAGCTTACATTTTA      55
195 orang     GCTTACATCTCAAATTTCTGGTACCTTCTCTCTGCAGTTCAAGAGCTTACATTTTA      55
195 gmk       GCTTACATCTCAAATTTCTGGTACCTTCTCTCTGCAGTTCAAGAGTTTACATTTTA      55
195 omk       GCTTACATCTCAAATTTCTGGTACCTTCTCTCTGCAGTTCAAGTGCTTACATTTTA      55

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Majority      ACTTACAAACTGAGAGTTCTATTTTCTTAATTAAGATATAGATTTGGTGAAATG
-----+-----+-----+-----+-----+
              60      70      80      90      100     110
-----+-----+-----+-----+-----+
195 genbank empty site ACTTACAAACTGAGAGTTCTATTTTCTTAATTAAGATATAGATTTGGTGAAATG      110
195 chimp      ACTTACAAACTGAGAGTTCTATTTTCTTAATTAAGATATAGATTTGGTGAAATG      110
195 pygmy chimp ACTTACAAACTGAGAGTTCTATTTTCTTAATTAAGATATAGATTTGGTGAAATG      110
195 gorilla    ACTTACAAACTGAGAGTTCTATTTTCTTAATTAAGATATAGATTTGGTGAAATG      110
195 orang     ACTTACAAACTGAGAGTTCTATTTTCTTAATGAAGATATAGATTTGGTGAAATG      110
195 gmk       ACTTACAAACTGAGAGTTCTATTTTCTTAATTAAGGTACAGGTTTGGTGAAATG      110
195 omk       ACTTACAAACTGAGGCTCTATTTTCTTAATTAAGATAGAGATTTGGTGAAATG      110

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Majority      TATTCATTTTCCACAGTT-----TAAAAGGC
-----+-----+-----+-----+-----+
              120     130     140     150     160
-----+-----+-----+-----+-----+
195 genbank empty site TATTCATTTTCCACAGTT-----TAAAAGGC      137
195 chimp      TATTCATTTTCCACAGTT-----TAAAAGGC      137
195 pygmy chimp TATTCATTTTCCACAGTT-----TAAAAGGC      137
195 gorilla    TATTCCTTTTCCACAGTT-----TAAAAGGC      137
195 orang     TATTCATTTTCCACAGTT-----TAAAAGGC      137
195 gmk       TATTCATTTTCCACATTTAAATCTTTTTATCCAGAACTGGGGAACCAAAGGC      165
195 omk       TATTCATTTTCCACATTTAAACCTTTTTATCCAGAACTGGGAAACCAAAGGT      165

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Majority      TTTGGCTCTTATGTTTTATTTCCAGAACCATCACCTTAATCATCTG
-----+-----+-----+-----+-----+
              170     180     190     200     210
-----+-----+-----+-----+-----+
195 genbank empty site TTTGGCTCTTACATTTTATTTCCAGAACCATCACCTTAATCATCTG      183
195 chimp      TTTGGCTCTTACGTTTTATTTCCAGAACCATCACCTTAATCATCTG      183
195 pygmy chimp TTTGGCTCTTATGTTTTATTTCCAGAACCATCACCTTAATCATCTG      183
195 gorilla    TTTGGCTCTTACGNGTATCTCCAGAGCCANGNCCTTAATCATCTG      183
195 orang     TTTGGCTCTTATGTTTTATTTCCAGAACCATCACCTTAATCATCTG      183
195 gmk       TTTGGCTCTTATGTTTTATTTCCAGAACCATCACCTTAATCATCTG      211
195 omk       TTTGGCTCTTATGTTTTATTTCCAGAACCATCACCTTAATCATCTG      211

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Majority      AGTTCACGGTCTCTATCTCTCCTTTCTCA-TTTATGTTAATCCAAATA-GTGATA
-----+-----+-----+-----+-----+
              10      20      30      40      50
-----+-----+-----+-----+
242 human filled site AGTTCACGGTCTCTATCTCTCCTTTCTCA-TTTATGTTAATCCAAATA-GTGATA 53
242 human empty site  AGTTCACGGTCTCTATCTCTCCTTTCTCACTTTATGTTAATCCAAATA-GTGGTA 54
242 chimp             AGTTCACGGTCTCTATCTCTCCTTTCTCA-TTTATGTTAATCCAAATA-GTGATA 53
242 orang             AGTTCACGGTCTCTATCTCTCCTTTCTCA-TTTATGTTAATCCAAATGTGTGATA 54
    
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Majority      CACACAGTGTATTGT-----
-----+-----+-----+-----+
              60      70      80      90     100     110
-----+-----+-----+-----+
242 human filled site CACACAGTGTATTGT---GCAGCCATAAAAAATGATGAGTTCATATCCTTTGTAGGG 105
242 human empty site  CACACAGTGTATTGT----- 70
242 chimp             CACACAGCGTTATTGT----- 69
242 orang             CACACAGTGTATTGT----- 70
    
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```

Majority      -----
-----+-----+-----+-----+
              120     130     140     150     160
-----+-----+-----+-----+
242 human filled site ACCTGGATGAAATTGGAAACCATCATTCTCAGTAAACTATCGCAAGAACAAAAA 160
242 human empty site  ----- 70
242 chimp             ----- 69
242 orang             ----- 70
    
```

```

Majority      -----
-----+-----+-----+-----+
              170     180     190     200     210     220
-----+-----+-----+-----+
242 human filled site CCAAACACCGCGTATTCTCACTCATAGGTGGGAATTGAACAATGAGATCACATGG 215
242 human empty site  ----- 70
242 chimp             ----- 69
242 orang             ----- 70
    
```

```

Majority      -----
-----+-----+-----+-----+
              230     240     250     260     270
-----+-----+-----+-----+
242 human filled site ACACAGGAAGGGGAATATCACACTCTGGGGACTGTGGTGGGGTCGGGGGAGGGGG 270
242 human empty site  ----- 70
242 chimp             ----- 69
242 orang             ----- 70
    
```

```

Majority      -----
-----+-----+-----+-----+
              280     290     300     310     320     330
-----+-----+-----+-----+
242 human filled site GAGGGATAGCATTGGGAGATATACCTAATGCTAGATGACACATTAGTGGGTGCAG 325
242 human empty site  ----- 70
242 chimp             ----- 69
242 orang             ----- 70
    
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```

Majority      -----
-----+-----+-----+-----+
              340     350     360     370     380
-----+-----+-----+-----+
242 human filled site CGCACCAGCATGGCACATGTATACATATGTAACCTAACCTGCACAATGTGCACATG 380
242 human empty site  ----- 70
242 chimp             ----- 69
242 orang             ----- 70
    
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```

Majority      -----
-----+-----+-----+-----+
              390     400     410     420     430     440
-----+-----+-----+-----+
242 human filled site TACCTAAAACTTAGAGTATAATTAACCAACCAACCAACCAACCAACCAACCAACCA 435
242 human empty site  ----- 70
242 chimp             ----- 69
242 orang             ----- 70
    
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```

Majority      -----
-----+-----+-----+-----+
    
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          450      460      470      480      490
-----+-----+-----+-----+-----+
242 human filled site AAAAAACCACCTGAAAAAAATACCTTCAGGCTGCTATATGTATAAAGTGTA 490
242 human empty site ----- 70
242 chimp ----- 69
242 orang ----- 70

Majority -----AAGAGTTAAAGAAAGAGGAAAGAAACA
-----+-----+-----+-----+
          500      510      520      530      540      550
-----+-----+-----+-----+
242 human filled site TATAAACATAAATGCATAAAAAAAGAGTTAAAGAAAGAGGAAAGAAACA 545
242 human empty site -----AAGAGTTAAAGAAAGAGGAAAGAAACA 97
242 chimp -----AAGAGTTAAAGAAAGAGGAAAGAAACA 96
242 orang -----AAGAGTTAAAGAAAGAGGAAAGAAACA 97

Majority CAAAAAGTGGCTCAACAGTCAAAGACAGGTT
-----+-----+-----+
          560      570      580
-----+-----+-----+
242 human filled site CAAAAAGTGGCTCAACAGTCANAGACAGGTT 576
242 human empty site CAAAAAGTGGCTCAACAGTCAAAGACAGGTT 128
242 chimp CAAAAAGTGGCTCAACAGTCAAAGACAGGTT 127
242 orang CAAAAAGTGGCTCAACAGTCAAAGACAGGTT 128

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L1HS245 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Monday, February 10, 2003 11:02 AM

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Majority AAGGCTCTTTATCACAGGAAGTACCATTTCATAGGATTGGCACTTCCACAAGAATT
-----+-----+-----+-----+-----+
          10      20      30      40      50
-----+-----+-----+-----+
245 genbank empty site AAGGCTCTTTATCACAGGAAGTACCATTTCATAGGATCGGCACTTCCACAAGAATT 55
245 chimp AAGGCTCTTTATCACAGGAAGTACCATTTCATAGGATTGGCACTTCCACAAGAATT 55
245 pc AAGGCTCTTTATCACAGGAAGTACCATTTCATAGGATTGGCACTTCCACAAGAATT 55
245 gmk AAGGCTCTTTATCACAGGAAGTACCATTTCATAGGATTGGCACTTCCACATGTATT 55
245 omk AAGGCTCTTTATCACAGGAAGTACCATTTCATAGGATTGGCACTTCCACAAGGATT 55

Majority AATAATGATTACTTACAATTATGATGACTTTTAAATAAAAACGACCTTTATTCTG
-----+-----+-----+-----+-----+
          60      70      80      90      100      110
-----+-----+-----+-----+
245 genbank empty site AATAATGATTACTTACAATTATGATGACTTTTAAATAAAAACGAACTTTATTCTG 110
245 chimp AATAATTATTACTTACAATTATGATGACTTTTAAATAAAAACGACCTTTATTCTG 110
245 pc AATAATTATTACTTACAATTATGATGACTTTTAAATAAAAACGACCTTTATTCTG 110
245 gmk AATAATGGTTACTTGC AATTATGATGACTTTTAAATAAAAATGACATTTATTCTG 110
245 omk AATAATGATTACTTACAATTGTGATGACTTTTAAATAAAAACGACCTTTATTCTG 110

Majority GTTACTTTTTAGGTAAATGCTTTTTATTTGGATATC-TAAGTTTATCTTATTTAC
-----+-----+-----+-----+-----+
          120      130      140      150      160
-----+-----+-----+-----+
245 genbank empty site GTTACTTTTTAGGTAAATGCTTTTTATTTGGATATC-TAAGTTTATCTTATTTAC 164
245 chimp GTTACTTTTTAGGTAAATGCTTTTTATTTGGATATT-TAAGTTTATCTTATTTAC 164
245 pc GTTACTTTTTAGGTAAATGCTTTTTATTTGGATATT-TAAGTTTATCTTATTTAC 164
245 gmk GTTACTTTTTAGGTAAATGCTTTTTATTTGGATATCCTAAGTTTATCTTATTTAC 165
245 omk GTTACTTTTTAGGTAAATGCTTTTTATTTGGATATC-TAAGTTTATCTCATTAC 164

Majority CAGGGATTTGATTC-ATTTTTTAAAAAATATGTATCTCTCATGCCATGTTGTAAA
-----+-----+-----+-----+-----+
          170      180      190      200      210      220
-----+-----+-----+-----+
245 genbank empty site CAGGGATTTGATTC-ATTTTTTAAAAAATATGTATCTCTCATGCCATGTTGTAAA 218
245 chimp CAGGGATTTGATTC-ATTTTTTAAAAAATATGTATCTCTCATGCCATGTTGTAAA 218
245 pc CAGGGATTTGATTC-ATTTTTTAAAAAATATGTATCTCTCATGCCATGTTGTAAA 218
245 gmk CAGGGATTTGATTCATGTTTTTTAAAAAATATGTATTTCTCATGCCATGTTGTAAA 220
245 omk CAGGGATTTGATTC-ATTTTTTAAAAAATATGTATCTCTCATGCCATGTTGTAAA 218

Majority ACAACAACAACAAGA-AAACA-AAAACATACCTTTTAGAGTGTATAGCTATTTTG
-----+-----+-----+-----+-----+
          230      240      250      260      270
-----+-----+-----+-----+

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L1HS314 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Monday, February 10, 2003 1:09 PM

```
Majority      -TGGCTAGCAAAAAGGTGGACTTGTATGTAAATAAATCCCCTTAAGAAGTCAAA
-----+-----+-----+-----+-----+-----+
              10      20      30      40      50
-----+-----+-----+-----+-----+
314 genbank empty site -TGGCTAGCAAAAAGGTGGACTTGTATGTAAATAAATCCCCTTAAGAAGTCAAA 54
314 pygmy chimp      TTGGCTAGCAAAAAGGTGGACTTGTATGTAAATAAATCCCCTTAAGAAGTCAAA 55
314 omk              -TGGCTAGCAAAAAGGTGGACGTGTATGTAAATAAATCCCCTTAAGCAGTCAAA 53

Majority      ATAAAAATGTTTCCTTTTTTCCTTTTTTCCTTTTGGTGACCATTTTTCTCTGCCCT
-----+-----+-----+-----+-----+
              60      70      80      90      100     110
-----+-----+-----+-----+-----+
314 genbank empty site ATAAAA-TGTTTCCTTTTTTCCTTTTTTCCTTTTGGTGACCATTTTTCTCTGCCCT 108
314 pygmy chimp      ATAAAAATGTTTCCTTTTTTCCTTTTTTCCTTTTGGTGACCATTTTTCTCTGCCCT 110
314 omk              ATAAAAAAAATTTTTTTTC-----TGACCATTTTTCTCTGCCCT 92
```

L1HS315 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Monday, February 10, 2003 1:34 PM

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Majority      AAGTCCCAATTCCTAGTCTGTCTTCCTCCTTCTTCCACTGTTTCAGAACCTTCT
-----+-----+-----+-----+-----+
              10      20      30      40      50
-----+-----+-----+-----+-----+
315 genbank empty site AAGTCCCAATTCCTAGTCTGTCTTCCTCCTTCTTCCACTGTTTCAGAACCTTCT 55
315 pygmy chimp      AAGTCCCAATTCCTAGTCTGTCTTCCTCCTTCTTCCACTGTTTCAGAACCTTCT 55
315 gmk              AAGTCCCAATTCCTAGTCTGTCTTCCTCCTTCTTCCACCGTTTCAGAACCTTCT 55

Majority      TAGGTTTGTTTTACATATAATATCTAGGGGGTTTAGCTGTG-----
-----+-----+-----+-----+-----+
              60      70      80      90      100     110
-----+-----+-----+-----+-----+
315 genbank empty site TAGGTTTGTTTTACATATAATATCTAGGGGGTTTAGCTGTG----- 96
315 pygmy chimp      TAGGTTTGTTTTACATATAATATCTAGGGGGTTTAGCTGTG----- 96
315 gmk              TAGGTTTGTTTTACATATAATATCTAGGGGGTTTAGCTATAATATCTAACAGGA 110

Majority      -----TTTAGCAGGAGGAATAGGGAGAAATGGGTGTATTCCATTTGCCTGGA
-----+-----+-----+-----+-----+
              120     130     140     150     160
-----+-----+-----+-----+-----+
315 genbank empty site -----TTTAGCAGGAGGAATAGGGAGAAATGGGTGTATTCCATTTGCCTGGA 143
315 pygmy chimp      -----TTTAGCAGGAGGAATAGGGAGAAATGGGTGTATTCCATTTGCCTGGA 143
315 gmk              GATAGATATTTTAGCAGGAGGAATAGGGAGAAATGGGAGTATTCCATTTTCCTGGA 165

Majority      ACTGGAATCCATCTTTGCATTAAAACTATTTTTT-CTTTTCTCTAACCAAGTGC
-----+-----+-----+-----+-----+
              170     180     190     200     210     220
-----+-----+-----+-----+-----+
315 genbank empty site ACTGGAATCCATCTTTGCATTAAAACTATTTTTT-CTTTTCTCTAACCAAGTGC 197
315 pygmy chimp      ACTGGAATCCATCTTTGCATTAAAACTATTTTTTCTTTTCTCTAACCAAGTGC 198
315 gmk              ACTGGAAGTCCATCTTTACATTAAAACTATTTTTT-CTTTTCTCTCACCAAGAGC 219

Majority      TTTTCTGACTCTTAAATTAGGGTATTGTGACATGATTCTGTGTC
-----+-----+-----+-----+-----+
              230     240     250     260
-----+-----+-----+-----+-----+
315 genbank empty site TTTTCTGACTCTTAAATTAGGGTATTGTGACATGATTCTGTGTC 241
315 pygmy chimp      TTTTCTGACTCTTAAATTAGGGTATTGTGACATGATTCTGTGTC 242
315 gmk              TTTTCTGATTCTTAAATTAGGGTATTGTGACATGATTCTGTGTC 263
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L1HS337 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Monday, February 10, 2003 2:04 PM

Majority	GGTACAATA-TGAGGCATCACGTAATTAAGCACCAGCATATTTATTTCAAAAAGT	
	-----+-----+-----+-----+-----+-----	
	10 20 30 40 50	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	GGTACAATA-TGAGGCATCACGTAATTAAGCACCAGCATATTTATTTCA-----	48
337 human empty site	GGTACAATA-TGAGGCATCACGTAATTAAGCACCAGCATATTTATTTCAAAAAGT	54
337 chimp	GGTACAATA-TGAGGCATCACGTAATTAAGCACCAGCATATTTATTTCAAAAAGT	54
337 owl monkey	GGTACAATA-TGAGGCATCACGTAATTAAGCACCAGTGTATTTATTTAAAAA--	52
Majority	AAGAGCTACAGGAATTTCAAAAAA-GA--AATTTAAGTCTATAGTAGCACCTAC	
	-----+-----+-----+-----+-----+-----	
	60 70 80 90 100 110	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	-----	48
337 human empty site	AAGAGCTACAGGAATTTCAAAAAAAGA--AATTTAAGTCTATAGTAGAACCTAC	107
337 chimp	AAGAGCTACAGGAATTTCAAAAAA-GA--AATTTAAGTCTATAGTAGCACCCAC	106
337 owl monkey	--GAGCTACAGGAGCTTCAAAAAA-GA--AATTTAAGTCTATAATAGCACCTAT	102
Majority	AAAAAACATAACGGCATGTGCCATAAAAAAGCTAA-ATAATAATATTACAACCATC	
	-----+-----+-----+-----+-----+-----	
	120 130 140 150 160	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	-----	48
337 human empty site	AAAAAACATAACGGCATGTGCCATAAAAAAGCTAA-ATAATAATATTACAACCATC	161
337 chimp	AAAAA-CATAACGGCATGTGCCATAAAAAAGCTAA-ATAATAATATTACAACCATC	159
337 owl monkey	AAAAAACATAACGACATGT-CCCCAAAAAGCTAA-ATAATGATATTACAGCCATC	155
Majority	TTTGCCAC--TCTCAATTCCTAAGAGGCCCAAGGAATGA-ATAACTTGGGAATA	
	-----+-----+-----+-----+-----+-----	
	170 180 190 200 210 220	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	-----	48
337 human empty site	TTTGCCAC--TCTCAATTCCTAAGAGGCCCAAGGAATGA-ATAACTTGGGAATA	213
337 chimp	TTTGCCAC--TCTCAATTCCTAAGAGGCCCAAGGAATGA-ATAACTTGGGAATA	211
337 owl monkey	TTTGCCACACTCTCAATTCCTAAGAGTCCCCAAGGAATGA-ATAACTTGGGAATA	209
Majority	TGACTTCTGTGATATTAATCTACCATTTCCAATATGCATGCAGAAATATTCTCAG	
	-----+-----+-----+-----+-----+-----	
	230 240 250 260 270	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	-----	48
337 human empty site	TGACTTCTGTGATATTAATCTACCATTTCCAATATGCATGCAGAAATATTCTCAG	268
337 chimp	TGACTTCTGTGATATTAATCTACCATTTCCAATATGCATGCAGAAATATTCTCAG	266
337 owl monkey	TGACTTCTGTGATATTAACCTACCATTTCCAATATGCATGCAGAAATATTCTCAG	264
Majority	ACATTTTCCTTACCTAGTGTGAGAACCCCTCCATGTAGAATAAAA-ACTAAATATT	
	-----+-----+-----+-----+-----+-----	
	280 290 300 310 320 330	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	-----	48
337 human empty site	ACATTTTCCTTACCTAGTGTGAGAACCCCTCCATGTAGAATAAAA-ACTAAATATT	322
337 chimp	ATATTTTCCTTACCTAGTGTGAGAACCCCTCCATGTAGAATAAAA-ACTAAATATT	320
337 owl monkey	ACATTTTCCTTACCTAGTGTGAGAACCCCTCCATGTAGAATAAAA-ACTAAATATT	318
Majority	GGATAGCTGTACA-ACAGCATTATT----AAAATATTCTCCTTTAATATGAAGAG	
	-----+-----+-----+-----+-----+-----	
	340 350 360 370 380	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	-----	48
337 human empty site	GGATAGCTGTACA-ACAGCATTATT----AAAATATTCTCCTTTAATATGAAGAG	372
337 chimp	GGATAGCTGTACA-ACAGCATTATT----AAAATATTCTCCTTTAATATGAAGAG	370
337 owl monkey	GGAAACTGTACA-ATGGCATTATT----AAAATACTCCCTTTAATATGAAAAG	368
Majority	AAGCAGGACTTTGAAGCAGCAATGTTCTACTTTTTTAAC-TAGAGAAAAACT----	
	-----+-----+-----+-----+-----+-----	
	390 400 410 420 430 440	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	-----TAGA	52
337 human empty site	AAGCAGGACTTTGAAGCAGCAATGGTCTACTTTTTTACCTAGAGAAAAACT----	423
337 chimp	AAGCAGGACTTTGAAGCAGCAATGTTCTACTTTTTTAAC-TAGAGAAAAACT----	420
337 owl monkey	AAGCAGGATTTTTAAGCAGCAATGTTTCTACTTTTTTAAC-TAGAGAAAAAC----	417

Majority

 -----+-----+-----+-----+-----+
 450 460 470 480 490
 -----+-----+-----+-----+-----+
 337 genbank filled site CCGCTAGCAAGACTAATGAAAAAGAGAGAAGAATCAAATAGACACAATAAAAAAT 107
 337 human empty site ----- 423
 337 chimp ----- 420
 337 owl monkey ----- 417

Majority

 -----+-----+-----+-----+-----+
 500 510 520 530 540 550
 -----+-----+-----+-----+-----+
 337 genbank filled site GATAAAGGGGATATCACCACCGATCCCACAGAAATACAACTACCATCAGAGAAT 162
 337 human empty site ----- 423
 337 chimp ----- 420
 337 owl monkey ----- 417

Majority

 -----+-----+-----+-----+-----+
 560 570 580 590 600
 -----+-----+-----+-----+-----+
 337 genbank filled site ACTACAAACACCTCTACGCAAATAAACTAGAAAATCTAGAAGAAATGGATACATT 217
 337 human empty site ----- 423
 337 chimp ----- 420
 337 owl monkey ----- 417

Majority

 -----+-----+-----+-----+-----+
 610 620 630 640 650 660
 -----+-----+-----+-----+-----+
 337 genbank filled site CCTCGACACATACACTCTCCCAAGACTAAACCAGGAAGAAGTTGAATCTCTGAAT 272
 337 human empty site ----- 423
 337 chimp ----- 420
 337 owl monkey ----- 417

Majority

 -----+-----+-----+-----+-----+
 670 680 690 700 710
 -----+-----+-----+-----+-----+
 337 genbank filled site AGACCAATAACAGGCTCTGAAATTGTGGCAATAATCAATAGTTTACCAACCAAAA 327
 337 human empty site ----- 423
 337 chimp ----- 420
 337 owl monkey ----- 417

Majority

 -----+-----+-----+-----+-----+
 720 730 740 750 760 770
 -----+-----+-----+-----+-----+
 337 genbank filled site AGAGTCCAGGACCAGATGGATTACAGCCGAATTCTACCAGAGGTACAAGGAGGA 382
 337 human empty site ----- 423
 337 chimp ----- 420
 337 owl monkey ----- 417

Majority

 -----+-----+-----+-----+-----+
 780 790 800 810 820
 -----+-----+-----+-----+-----+
 337 genbank filled site ACTGGTACCATTCTCTGAACTATTCCAATCAATAGAAAAAGAGGGAATCCTC 437
 337 human empty site ----- 423
 337 chimp ----- 420
 337 owl monkey ----- 417

Majority

 -----+-----+-----+-----+-----+
 830 840 850 860 870 880
 -----+-----+-----+-----+-----+
 337 genbank filled site TCTAACTCATTTTATGAGGCCAGCATCTCTGATACCAAAGCCGGGCAGAGACA 492
 337 human empty site ----- 423
 337 chimp ----- 420
 337 owl monkey ----- 417

Majority

 -----+-----+-----+-----+-----+
 890 900 910 920 930


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-----+-----+-----+-----+-----+-----
337 genbank filled site CAACCAAAAAGAGAATTTTAGACGAATATCCTTGATGAACACTGATGCAAAAAT 547
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+-----
          940      950      960      970      980      990
-----+-----+-----+-----+-----+-----
337 genbank filled site CCTCAATAAAAATACTGGCAAACCGAATCCAGCAGCACATCAAAAAGCTTATCCAC 602
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+-----
          1000     1010     1020     1030     1040
-----+-----+-----+-----+-----+-----
337 genbank filled site CATGATCAAGTGGGCTTCATCCCTGGGATGCAAGGCTGGTTCAATATATGCAAAT 657
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+-----
          1050     1060     1070     1080     1090     1100
-----+-----+-----+-----+-----+-----
337 genbank filled site CAATAAATGTAATCCAGCATATAAACAGAGCCAAAGACAAAACCACATGATTAT 712
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+-----
          1110     1120     1130     1140     1150
-----+-----+-----+-----+-----+-----
337 genbank filled site CTCAATAGATGCAGAAAAAGCCTTTGACAAAATTCAACAACCCTTCATGCTAAAA 767
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+-----
          1160     1170     1180     1190     1200     1210
-----+-----+-----+-----+-----+-----
337 genbank filled site ACTCTCAATTAATTAGGTATTGATGGGACGTATTTCAAATAATAAGAGCTATCT 822
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+-----
          1220     1230     1240     1250     1260
-----+-----+-----+-----+-----+-----
337 genbank filled site ATGACAAACCCACAGCCAATATCATACTGAATGGGCAAAAACCTGGAAGCATTCCC 877
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+-----
          1270     1280     1290     1300     1310     1320
-----+-----+-----+-----+-----+-----
337 genbank filled site TTGAAAACCTGGCACAAGACAGGGATGCCCTCTCTCACCGCTCCTATTCAACATA 932
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+-----
          1330     1340     1350     1360     1370
-----+-----+-----+-----+-----+-----
337 genbank filled site GTGTTGGAAGTTCTGGCCAGCGCAATCAGGCAGGAGAAGGAAATAAAGGGTATTC 987
337 human empty site ----- 423
337 chimp ----- 420

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337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----+	
	1380 1390 1400 1410 1420 1430	
	-----+-----+-----+-----+-----+-----+	
337 genbank filled site	AATTAGGAAAAGAGGAAGTCAAATGTCCTGTTGCAGACGACATGATTGTTTA	1042
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----+	
	1440 1450 1460 1470 1480	
	-----+-----+-----+-----+-----+-----+	
337 genbank filled site	TCTAGAAAACCCCATCGTCTCAGCCCAAATCTCCTTAAGCTGATAAGCAACTTC	1097
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----+	
	1490 1500 1510 1520 1530 1540	
	-----+-----+-----+-----+-----+-----+	
337 genbank filled site	AGCAAAGTCTCAGGATACAAAATCAATGTACAAAAATCACAAGCATTCTTATACA	1152
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----+	
	1550 1560 1570 1580 1590	
	-----+-----+-----+-----+-----+-----+	
337 genbank filled site	CCAACAACAGACAAACAGAGGCCAAAGCATGGGTGAACTCCCATTACAATTGC	1207
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----+	
	1600 1610 1620 1630 1640 1650	
	-----+-----+-----+-----+-----+-----+	
337 genbank filled site	TTCAAAGAGAATAAAATACCTAGGAATCCAACTTACAAGGGATGTGAAGGACCTC	1262
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----+	
	1660 1670 1680 1690 1700	
	-----+-----+-----+-----+-----+-----+	
337 genbank filled site	TTCAAGGAGAACTACAAACCACTGCTCAAGGAAATAAAGAGGACACAAACAAAT	1317
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----+	
	1710 1720 1730 1740 1750 1760	
	-----+-----+-----+-----+-----+-----+	
337 genbank filled site	GGAAGAACATTCCATGCTCATGGGTAGGAAGAATCAACATCGTGAAAATGGCCAT	1372
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----+	
	1770 1780 1790 1800 1810	
	-----+-----+-----+-----+-----+-----+	
337 genbank filled site	ACTGCCCAAGGTAATTTACAGATTCAATGCCATCCCCATCAAGCTACCAATGACT	1427
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----+	

	1820	1830	1840	1850	1860	1870	
337 genbank filled site	TTCTTCACAGAATTGGAAAAAATACTTTAAAGTTCATATGGAACCAAAAAAGAG						1482
337 human empty site	-----						423
337 chimp	-----						420
337 owl monkey	-----						417
Majority	-----						
	1880	1890	1900	1910	1920		
337 genbank filled site	CCCGCATCGCCAAGTCAATCCTAAGCCAAAAGAACAAAGCTGGAGGCATCACACT						1537
337 human empty site	-----						423
337 chimp	-----						420
337 owl monkey	-----						417
Majority	-----						
	1930	1940	1950	1960	1970	1980	
337 genbank filled site	ACCTGACTTCAAACATACTACAAGGCTACAGTAACCAAAACAGCATGGTACTGG						1592
337 human empty site	-----						423
337 chimp	-----						420
337 owl monkey	-----						417
Majority	-----						
	1990	2000	2010	2020	2030		
337 genbank filled site	TACCAAAACAGAGATATAGATTAATGGAACAGAACAGAGCCCTCAGAAATAATGC						1647
337 human empty site	-----						423
337 chimp	-----						420
337 owl monkey	-----						417
Majority	-----						
	2040	2050	2060	2070	2080	2090	
337 genbank filled site	CACATATCTACAACATATCTGATCTTTGACAAACCTGAGAAAAACAAGCAATGGGG						1702
337 human empty site	-----						423
337 chimp	-----						420
337 owl monkey	-----						417
Majority	-----						
	2100	2110	2120	2130	2140		
337 genbank filled site	AAAGGATTCCTATTTAATAAAATGGTGTGGGAAAACTGGCTAGCCATATGTAGA						1757
337 human empty site	-----						423
337 chimp	-----						420
337 owl monkey	-----						417
Majority	-----						
	2150	2160	2170	2180	2190	2200	
337 genbank filled site	AAGCTGAAACTGGATCCCTTCCTTACACCTTATACAAAAATCAATTCAAGATGGA						1812
337 human empty site	-----						423
337 chimp	-----						420
337 owl monkey	-----						417
Majority	-----						
	2210	2220	2230	2240	2250		
337 genbank filled site	TTAAAGATTTAAACGTTAGACCTAAAACCATAAAAAACCCTAGAAGAAAACCTAGG						1867
337 human empty site	-----						423
337 chimp	-----						420
337 owl monkey	-----						417
Majority	-----						
	2260	2270	2280	2290	2300	2310	
337 genbank filled site	CATTACCATTGAGGACATAGGCGTGGGCAAGGACTTCATGTCCAAAACACCAAAA						1922
337 human empty site	-----						423

337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----	
	2320 2330 2340 2350 2360	
	-----+-----+-----+-----+-----	
337 genbank filled site	GCAATGGCAACAAAAGCCAAAATTGACAAATGGGATCTAATTAACATAAAGAGCT	1977
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----	
	2370 2380 2390 2400 2410 2420	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	TCTGCACAGCAAAAAGAACTACCATCAGAGTGAACAGGCAACCTACAACATGGGA	2032
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----	
	2430 2440 2450 2460 2470	
	-----+-----+-----+-----+-----	
337 genbank filled site	GAAAATTTTCGCAACCTACTCATCTGACAAAGGGCTAATATCCAGAATCTACAAT	2087
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----	
	2480 2490 2500 2510 2520 2530	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	GAACTCAAACAAATTTACAAGAAAAAACAACAACCCCATCAAAAAGTGGGCAA	2142
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----	
	2540 2550 2560 2570 2580	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	AGGACATGAACAGACACTTCTCAAAAGAAGACATTTATGCAGCCAAAAAACACAT	2197
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----	
	2590 2600 2610 2620 2630 2640	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	GAAGAAATGCTCATCCTACTGGCCATCAGAGAAATGCAAATCAAACCACTATG	2252
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----	
	2650 2660 2670 2680 2690	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	AGATATCATCTCACACCAGTTAGAATGGCCATCATTA AAAAGTCAGGAAACAACA	2307
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	
	-----+-----+-----+-----+-----+-----	
	2700 2710 2720 2730 2740 2750	
	-----+-----+-----+-----+-----+-----	
337 genbank filled site	GGTGCTGGAGAGGATGTGGAGAAATAGGAACACTTTTACTGTTGGTGGGACTG	2362
337 human empty site	-----	423
337 chimp	-----	420
337 owl monkey	-----	417
Majority	-----	

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-----+-----+-----+-----+-----+
                2760      2770      2780      2790      2800
-----+-----+-----+-----+-----+
337 genbank filled site TAAACTAGTTCAACCATTGTGGAAGTCAGTGTGGCGATTCCCTCAGGGATCTAGAA 2417
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
                2810      2820      2830      2840      2850      2860
-----+-----+-----+-----+-----+
337 genbank filled site CTGGAAATACCATTGACCCAGCCATCCCATTACTGGGTATATACCCAAAGGACT 2472
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
                2870      2880      2890      2900      2910
-----+-----+-----+-----+-----+
337 genbank filled site ATAAATCATGCTGCTATAAAGACACATGCACACGTATGTTTATTGCGGCACTATT 2527
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
                2920      2930      2940      2950      2960      2970
-----+-----+-----+-----+-----+
337 genbank filled site CACAATAGCAAAGACTTGGAAACCAACCCAAATGTCCAACAATGATAGACTGGATT 2582
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
                2980      2990      3000      3010      3020
-----+-----+-----+-----+-----+
337 genbank filled site AAGAAAATGTGGCACATATACCCATGGA---ATACTAT-GCAGCCATAAAAAA 2632
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
                3030      3040      3050      3060      3070      3080
-----+-----+-----+-----+-----+
337 genbank filled site TGATGAGTTCATATCCTTTGTAGGGACATGGATGAAATTGGAAACCATCATTCTC 2687
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
                3090      3100      3110      3120      3130
-----+-----+-----+-----+-----+
337 genbank filled site AGTAAACTATCACAGAACAACAAAAACCAAACTGC-ATATTCTCACTCATAGGT 2741
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
                3140      3150      3160      3170      3180      3190
-----+-----+-----+-----+-----+
337 genbank filled site GGGAATTGAACAATGAGATCACATGGACACAGGAAGGGGAATATCACACTCTGGG 2796
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
                3200      3210      3220      3230      3240
-----+-----+-----+-----+-----+
337 genbank filled site GACTGTGGTGGGGTCGGGGAGGGGGGATGGATAGCATGGGAGATATACCTAAT 2851

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337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
          3250      3260      3270      3280      3290      3300
-----+-----+-----+-----+-----+
337 genbank filled site GCTAGATGACACATTAGTGGGTGCAGCGCCAGGCATGGCACATGTATACATATGT 2906
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
          3310      3320      3330      3340      3350
-----+-----+-----+-----+-----+
337 genbank filled site AACTAACCTGCACAATGTGCACATGTACCCTAAACTTAG-AGTATAATAAAAAA 2960
337 human empty site ----- 423
337 chimp ----- 420
337 owl monkey ----- 417

Majority -----
-----+-----+-----+-----+-----+
-----TAAATAAATCTTGAAGCAAGCA
          3360      3370      3380      3390      3400      3410
-----+-----+-----+-----+-----+
337 genbank filled site ATAAAAATAAAAAAATAAA-TAAATAAATAAATAAATAAATCTTGAAGCAAGCA 3014
337 human empty site -----TAAATAAATCTTGAAGCAAGCA 445
337 chimp -----TAAATAAATCTTGAAGCAAGCA 442
337 owl monkey -----AAATACATCTTGAAGCAAGAA 438

Majority AGGATCAAATAAATTTGGGCTCTAGTTTTTCACATTACAATTTTGCCATTCCAAGAT
-----+-----+-----+-----+-----+
          3420      3430      3440      3450      3460
-----+-----+-----+-----+-----+
337 genbank filled site AGGATCAAATAAATTTGGGCTCTAGTTTTTCACATTACAATTTTGCCATTCCAAGAT 3069
337 human empty site AGGATCAAATAAATTTGGGCTCTAGTTTTTCACATTACAATTTTGCCATTCCAAGAT 500
337 chimp AGGAACAATAAATCTGGGCTCTAGTTTCCACATTACAATTTTGCCATTCCAAGAT 497
337 owl monkey AGGATCAAAGAATTTGGGTTCTAGCTTCCACATTACAATTTTGCCATTCCAAGAC 493

Majority GATAGTTTCTTAGAATCTAACAGTTTTTAGCCAGACAAGGACTTAGTATATATTC
-----+-----+-----+-----+-----+
          3470      3480      3490      3500      3510      3520
-----+-----+-----+-----+-----+
337 genbank filled site GATAGTTTCTTAGAATCTAACAGTTTTTAGCCAGACAAGGACTTAGTATATATTC 3124
337 human empty site GATAGTTTCTTAGAATCTAACAGTTTTTAGCCAGACAAGGACTTAGTATATATTC 555
337 chimp GATAGTTTCTTAGAATCTAACAGTTTTTAGCCAGACAAGGACTTAGTATATATTC 552
337 owl monkey AATAGTGTCTTAGAATCTAACAAATTTTAGCTAGACAAGGACTTAGTATATATACC 548

Majority TGTAGTCTAACTGAAATATTTTAGATCAGCAAAGCTATAAAGGATGCTAC
-----+-----+-----+-----+-----+
          3530      3540      3550      3560      3570
-----+-----+-----+-----+-----+
337 genbank filled site TGTAGTCTAACTGAAATATTTTAGATCAGCAAAGCTATAAAGGATGCTAC 3174
337 human empty site TGTAGTCTAACTGAAATATTTTAGATCAGCAAAGCTATAAAGGATGCTAC 605
337 chimp TGTAGTCTAACTGAAATATTTTAGATCAGCAAAGCTATAAAGGATGCTAC 602
337 owl monkey TGNAGTCTA-TTGAAATATTTAGATCAGCAAAGCTATAAANGGATGCTAC 597

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L1HS348 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Monday, February 10, 2003 3:52 PM

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Majority GAAATGGGAAGAGGAGTTGACAATATGTCATTTTTTTTTT-----AGAAA
-----+-----+-----+-----+-----+
          10      20      30      40      50
-----+-----+-----+-----+-----+
348 genbank empty site GAAATGGGAAGAGGAGTTGACAATATGTCATTTTTTTTTT-----AGAAA 45
348 chimp GAAATGGGAAGAGGAGTTGACAATATGTCATTTTTTTTTT-----GAAA 44
348 gorilla GAAATGGGAAGAGGAGTTGACAATATGTCATTTTTTTTTTTTTTTAGAAA 50
348 gmk GAAATGGGAAGAGGAGTTGACAATATGTCAGTTTTTTTTT-----AGAAA 45

Majority TGACAATATGTCATTT-----TTTAGTTGACAATATGTCATTTTTTTCTCT

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-----+-----+-----+-----+-----+
          60          70          80          90          100
-----+-----+-----+-----+
348 genbank empty site TGACAATATGTCATTTTTTTTTTAGTTGACAATATGTCATTTTTTCTCT 95
348 chimp                TGACAATATGTCATTT-----TTTTTCTCT 68
348 gorilla              TGACAATATGTCATTT----TTTAGTTGACAATATGTCATTTTTTCTCT 96
348 gmk                  G----- 46

Majority                TCAATACATTAAGAGAATCTTATCAATAAATAAGTAAAAATCAACCTTTCT
-----+-----+-----+-----+
          110         120         130         140         150
-----+-----+-----+-----+
348 genbank empty site TCAATACATTAAGAGAATCTTATCAATAAATAAGTAAAAATCAACCTTTCT 145
348 chimp                TCAATACATTAAGAGAATCTTATCAATAAATAAGTAAAAATCAACCTTTCT 118
348 gorilla              TCAATACATTAAGAGAATCTTATCAATAAATAAGTAAAAATCAACCTTTCT 146
348 gmk                  TCAATACATTAAGAGAATCTTATCAATA----AGTAAAAATCAGCCTTTCT 92

Majority                CTAATATATCTGTTTTTACCAGATATATTGAGTTCAGCAATAACATGAG
-----+-----+-----+-----+
          160         170         180         190         200
-----+-----+-----+-----+
348 genbank empty site CTAATATATCTGTTTTTACCAGATATATTGAGTTCAGCAATAACATGAG 195
348 chimp                CTAATATATCTGTTTTTACCAGATATATTGAGTTCAGCAATAACATGAG 168
348 gorilla              CTAATATATCTGTTTTTACCAGATATATTGAGTTCAGCAATAACATGAG 196
348 gmk                  CTAACATATCTGTTTTTACCAGATATATTGAGTTCAGCCATAACATGAG 142

Majority                AATCCAAACTATTCCAATGATTTGATTGTTTATCTCTGTCTCTTTTCACAT
-----+-----+-----+-----+
          210         220         230         240         250
-----+-----+-----+-----+
348 genbank empty site AATCCAAACTATTCCAATGATTTGATTGTTTATCTCTGTCTCTTTTCACAT 245
348 chimp                AATCCAAACTATTCCAATGATTTGATTGTTTATCTCTGTCTCTTTTCACAT 218
348 gorilla              AATCCAAACTATTCCAATGATTTGATTGTTTATCTCTGTCTCTTTTCACAT 246
348 gmk                  AATT-AAACTATTCTGATAAATTTGATTGTTTATCTCTGTCTCTTTTCATAT 191

Majority                GCACATTTATCTCATTACACACACACAAGAAGAAAGAAAGCTATATCATA
-----+-----+-----+-----+
          260         270         280         290         300
-----+-----+-----+-----+
348 genbank empty site GCACATTTATCTCATTACACACACACAAGAAGAAAGAAAGCTATATCATA 295
348 chimp                GCACATTTATCTCATTACACACACACAAGAAGAAAGAAAGCTATATCATA 268
348 gorilla              GCACATTTATCTCATTACACACACACAAGAAGAAAGAAAGCTATATCATA 296
348 gmk                  GCACATTTATCTCACTACAAACACACAA--AGAAAGAAAGCTATATCATA 239

Majority                TTATATAATGAGGAAAGTTAACACAGAAACATAATAAACAGAAGACTGGT
-----+-----+-----+-----+
          310         320         330         340         350
-----+-----+-----+-----+
348 genbank empty site TTATATAATGAGGAAAGTTAACACAGAAACATAATAAACAGAAGACTTGT 345
348 chimp                TTATATAATGAGGAAAGTTAACACAGAAACATAATAAACAGAAGACTGGT 318
348 gorilla              TTATATAATGATGAAAGTTAACACAGAAACATAATAAAC--AAGACTGGT 344
348 gmk                  TTTTATAATGAGGAAAGTTAACACAGAAACATAATAAATAGAAGACTGGT 289

Majority                GTGAAGATTTGTAAAAATCACACATATGACAAACACTTAAAAGTATATAA
-----+-----+-----+-----+
          360         370         380         390         400
-----+-----+-----+-----+
348 genbank empty site GTGAAGATTTGTAAAAATCACACATATGACAAACACTTAAAAGTATATAA 395
348 chimp                GTGAAGATTTGTGAAAATCACACATATGACAAACACTTAAAAGTATATAA 368
348 gorilla              GTGAAGATTTGTAAAAATCACACATATGACAAACACTTAAAAGTATATAA 394
348 gmk                  GTGAAGACTTGTAAAAAGCACACCTATGACAAACACTTAAA-GTATATAA 338

Majority                TTCAGAGTAAAAATATGTAAGGGTATAAGAAATAACATGAAGAAGCTTGAA
-----+-----+-----+-----+
          410         420         430         440         450
-----+-----+-----+-----+
348 genbank empty site TTCAGAGTAAAAATATGTAAGGGTATAAGAAATAACATGAAGAAGCTTGAA 445
348 chimp                TTCAGAGTAAAAATATGTAAGGGTATAAGAAATAACATGAAGAAGCTTGAA 418
348 gorilla              TTCAGAGTAAAAATATGTAAGGGTATAAGAAATAACANGAAGAAGCTTGAA 444
348 gmk                  TTCAGAGTAAAAATATGTAAGGGTATAAGAAATAACATGAAGAAGCTTGAA 388

Majority                AGTATGCTGCAACCTTAAAAAATGTCTTTGACAGGTCTATAAGAACAAA
-----+-----+-----+-----+
          460         470         480         490         500
-----+-----+-----+-----+
348 genbank empty site AGTATGCTACAACCTTAAAAAATGTCTTTGACAGGTCTATAAGAACAAA 494

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348 chimp      AGTATGCTACAAGCTTAAAAAATGTCTTTGACAGTCTATAAGAACAAA    468
348 gorilla   AGTACGCTGCAACCTTAAAAAATGTCTTNGACAGGTCTATAAGAACAAA    494
348 gmk       ATTATGCTGCAACCTTAAAAAATGTCTTTGACAGGTCTATAAGAACAAA    438

Majority      ATTGCGACATCAGCTGAGATAAAAAATAGG
-----+-----+-----
                    510      520
-----+-----+-----

348 genbank empty site ATTGCGACATCAGCTGAGATAAAAAATAGG    523
348 chimp     ATTGCGACATCAGCTGAGATAAAAAATAGG    497
348 gorilla   ATTGCGACATCAGCNGAGATAAAAAATAGG    523
348 gmk       ATTGCGACATCAGCTGAGATAAAAAATAGG    467

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L1HS361 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Monday, February 10, 2003 4:49 PM

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Majority      AGCCCA-TTAGATATATGTGGCTGTGACTCXCAACTCAAGGATACCTCTAAGT
-----+-----+-----+-----+-----+-----
                    10      20      30      40      50
-----+-----+-----+-----+-----+-----

361 genbank empty site AGCCCA-TTAGATATATGTGGCTGTGACTCAGAATACTCAAG-----    41
361 chimp     AGCCCA-TTAGATATATGTGGCTGTGACTCAGAATACTCAAG-----    41
361 gmk       AGCCCACTTAGATATATGTGGCTGTGACTCNCNATACTCAAGGATACCTCTAAGT    55
361 rhesus macaque AGCCCN-TTAGATATATGTGGCTGTGACTCNCNATACTCNAAGGTACCTCTAAGT    54
361 macaque   AGCCCN-TTAGATATATGTGGCTGTGACTCNCNATACTCAAGGATACCTCTAAGT    54

Majority      TCXAATGGGCTATGAAATTAAGTC-TTGTACXGTATATTTTGTAAATGAAA---
-----+-----+-----+-----+-----+-----
                    60      70      80      90     100     110
-----+-----+-----+-----+-----+-----

361 genbank empty site -----    41
361 chimp     -----    41
361 gmk       TCNAATGGGCTATGAAATTAAGTC-TTGTACNGTATATTTTATAAATGAAAGAA    110
361 rhesus macaque TCNAATGGGCTATGAAATTAAGTC-TTGTACAGTATATTTTGTAAATGAAAGAA    108
361 macaque   TCNAATGGGCTATGAAATTAAGTC-TTGTACNGTATATTTTGTAAATGAAA---    105

Majority      -GTAAAAAATCAGTGTATTGCACTTAGTAAGGATAAGTGTGTTTTGTGACTAT
-----+-----+-----+-----+-----+-----
                    120     130     140     150     160
-----+-----+-----+-----+-----+-----

361 genbank empty site -----    41
361 chimp     -----    41
361 gmk       AGTAAAAAATCAGTGTATTGCACTTAGTAAGGATAAGTGTGTTTTGTGACTAT    165
361 rhesus macaque AGTAAAAAATCAGTGTATTGCACTTAGTAAGGATAAGTGTGTTTTGTGACTAT    163
361 macaque   -GTAAAAAATCNGTGTATTGCACTTAGTAAGGATAAGTGTGTTTTGTGACTAT    159

Majority      TTTAGTTATATATGTAATGTGGTCTGATTTTCTGATGACTGACCGTAAAGAAT
-----+-----+-----+-----+-----+-----
                    170     180     190     200     210     220
-----+-----+-----+-----+-----+-----

361 genbank empty site -----    41
361 chimp     -----    41
361 gmk       TTTAGTTATATATGTAATGTGGTCTGATTTTCTGATGACTGACCGTAAAGAAT    220
361 rhesus macaque TTTAGTTATATATGTAATGTGGTCTGATTTTCTGATGACTGACCGTAAAGAAT    218
361 macaque   TTTAGTTATATATGTAATGTGGTCTGATTTTCTGATGACTGACCGTAAAGAAT    214

Majority      GTCTCTATTTGGCATTCTTC-CTCAGGACAGATCTGTGTTTTACTCXGTTATTT
-----+-----+-----+-----+-----+-----
                    230     240     250     260     270
-----+-----+-----+-----+-----+-----

361 genbank empty site -----    41
361 chimp     -----    41
361 gmk       GTCTCTATTTGGNATTCTTCCACTCAGGACAGATCTGTGTTTTACTCNGTTATTT    275
361 rhesus macaque GTCTCTATTTGGCATTCTTCCACTCAGGACAGATCTGTGTTTTACTCAGTTATTT    273
361 macaque   GTCTCTATTTGGCATTCTTCCACTCAGGACAGATCTGTGTTTTACTCNGTTATTT    269

Majority      TAGTTCAGTTTAGTTGAGTATTAGTTTAGTCAG-CTAAGGTAGCAG-TATGAAGC
-----+-----+-----+-----+-----+-----
                    280     290     300     310     320     330
-----+-----+-----+-----+-----+-----

361 genbank empty site -----    41

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361 chimp	-----	41
361 gmk	TAGTTCNGTTTAGTTGAGTATTAGTTTAGTCNC-CTAAGGTAGCAG-TATGAAGC	328
361 rhesus macaque	TAGTTCAGTTTAGTTGAGTATTAGTTTAGTCAG-CTAAGGTAGCAG-TATGAAGC	326
361 macaque	TAGNTCAGTTTAGTTGAGTATTAGTTTAGTCAGGCTAAGGTAGCCGCTATNAAGC	324
Majority	TC-ATGG--TTTGTAAAACTGGC-TAAAACTGATTCCTT--CCGC-TTTAGGCA	
	-----+-----+-----+-----+-----+-----	
	340 350 360 370 380	
	-----+-----+-----+-----+-----+-----	
361 genbank empty site	-----	41
361 chimp	-----	41
361 gmk	TC-ATGGC-TTTGTAAAACTGGC-TAAAACTGATTCCTT--CCGCCTTTAGGNC	378
361 rhesus macaque	TC-ATGGNCTTTGTAAAACTGGCCTAAAACTGATTCCTT--CAGC-TTTAGGCA	377
361 macaque	TCCATGGGCTTTGNAAAACTGCC-TAAAACTGATTCCTTCCCGCTTTTAGGCA	378
Majority	GGAGAATTGCTG---AGGACT-TTTGAGCC-TTGG--TAGCCTGACAGGA---CA	
	-----+-----+-----+-----+-----+-----	
	390 400 410 420 430 440	
	-----+-----+-----+-----+-----+-----	
361 genbank empty site	-----	41
361 chimp	-----	41
361 gmk	NGAGAATTGCTG---AGGACTCTTTGAGCCCTTGG--TAGCCTGACAGGA---CA	425
361 rhesus macaque	GGAGAATTGCTG---AGGACT-TTTGAGCC-TTGC--TAGCCTGACAGGA---CA	422
361 macaque	GGGGNAATGGCNTGANGGACCTTTTGGAGNCCNGGCTTAGCCGGACCCGGACCCA	433
Majority	CCC-TTAA-TAGC-----GGGGCCCTG-AGC--AGTCACTTAA---CCCTTTT	
	-----+-----+-----+-----+-----+-----	
	450 460 470 480 490	
	-----+-----+-----+-----+-----+-----	
361 genbank empty site	-----	41
361 chimp	-----	41
361 gmk	CCCNNTANNTAGCA-----GGGGCCNTG-AGCCAAGTCACCTAN---CCCTTTT	471
361 rhesus macaque	ACCATTAAC TAGCG-----NGGGCCCTG-AGC--AGTCACTTAA---CCCTTTT	466
361 macaque	CCCTTNAACNNCNCGGGGGGGCCCTGGNGNAAGGCCCCCTAAANCCCTTTTT	488
Majority	ATG-TCT--AATCCCCC-----ATATATGGG-A-AAATTTTC--AATACC--A	
	-----+-----+-----+-----+-----+-----	
	500 510 520 530 540 550	
	-----+-----+-----+-----+-----+-----	
361 genbank empty site	-----	41
361 chimp	-----	41
361 gmk	ATGTTCT--AATCTCCAC-----ATATATATGTAGAAATTTTC--AATACC--A	514
361 rhesus macaque	ATGNTCT--AATCCCCC-----ATATATGGGGGAAAAATTTTC--CATACC-A	510
361 macaque	AGGCTNCCAAACCCCCCCCCAAANTTTCCGGNNACAAANTTTCCCAACNCCAN	543
Majority	AAATAGGGTC-CT-GGG---TCA-ACCCCTAAGAAAAAGG-G----CCAG-GG	
	-----+-----+-----+-----+-----+-----	
	560 570 580 590 600	
	-----+-----+-----+-----+-----+-----	
361 genbank empty site	-----	41
361 chimp	-----	41
361 gmk	AAATAGAGTCACTTGTG---TCA-AATCCTAAGAAAACGGAG-----CCAGGAG	559
361 rhesus macaque	AAATANGGTCNCT-GGG---TCA-ACCCNTAAGAAAAANGGAC---CCAGAGG	556
361 macaque	AAACTGGGGCCCTCNGGGGGCCACACCNCACNNAAGGNGACCCCCNAANGC	598
Majority	CCCA-GAAGAAAGAGTCTCAGC-ACATATCCCG-TAAC-GGACTTATCAAAA	
	-----+-----+-----+-----+-----+-----	
	610 620 630 640 650 660	
	-----+-----+-----+-----+-----+-----	
361 genbank empty site	-----	41
361 chimp	-----	41
361 gmk	GCCATGAGGAAAGAGTCTCAGC-ACATATCCCTG-TAACAGGACTTATCAAAA	612
361 rhesus macaque	CCCANGAAGAAAGAGTCTCATGCCACATATCCCGGTAACNGGACTTATCAAAA	611
361 macaque	CCCCNCNAAAAANAAGCCNCTCNGCNCCTACNCCNNNNNACGGGNCNCTCNNA	653
Majority	GAACT----GC-GCATGTATGCCTATGACAGAAAXGATGCCAG-AAC---TCCT	
	-----+-----+-----+-----+-----+-----	
	670 680 690 700 710	
	-----+-----+-----+-----+-----+-----	
361 genbank empty site	-----	41
361 chimp	-----	41
361 gmk	GAACTT----GCTGCATGTATGCCTATGACAGAAATGATGCCAGCAAC---TCCT	660
361 rhesus macaque	GAACTN----GCNGCATGTATGCCTATGACAGAAANGATGCCAGGAAC---TCCT	659
361 macaque	CAANCCCCCGNCCNCCNCCNCCNCCNCCNCCNCCNCCNCCNCCNCCNCCNCCNCC	708
Majority	CAAAAGCACAGCATCCAGATAAGCTTCTXX--CAC-AGGACATTTGTCCAAAA	


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Majority      GTTAGACAGCGACATGCACAGCCCAGGTCCCCTCAAGGGCAGATATATCCTCTTA
-----+-----+-----+-----+-----+
              10      20      30      40      50
-----+-----+-----+-----+-----+
363 human filled site  GTTAGACAGCGACATGCACAGCCCAGGTCCCCTCAAGGGCAGATATATCCTCTTA      55
363 gen bank empty site GTTAGACAGCGACATGCACAGCCCAGGTCCCCTCAAGGGCAGATATATCCTCTTA      55
363 chimp          GTTAGACAGCGACATGCACAGCCCAGGTCCCCTCAAGGGCAGATATATCCTCTTA      55
363 galago         GTTAGACAGCGACATGCACAGCTTAGGCCCTCTTCAGGATGAACATATGTCCTTA      55

Majority      GTTTCCTCTTGTTTCGTGATGGTTTCTTGGTCTTTCCTTGTGTCTCATGATCTTGA
-----+-----+-----+-----+-----+
              60      70      80      90      100     110
-----+-----+-----+-----+-----+
363 human filled site  GTTTCCTCTTGTTTCGTGATGGTTTCTTGGTCTTTCCTTGTGTCTCATGATCTTGA      110
363 gen bank empty site GTTTCCTCTTGTTTCGTGATGGTTTCTTGGTCTTTCCTTGTGTCTCATGATCTTGA      110
363 chimp          GTTTCCTCTTGTTTCGTGATGGTTTCTTGGTCTTTCCTTGTGTCTCATGATCTTGA      110
363 galago         GTTTCCTCTTGTTTGTGATGGTTTTTCAGTCAGTCTTCGTGTATCATGACTTTGA      110

Majority      CAC-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+
              120     130     140     150     160
-----+-----+-----+-----+-----+
363 human filled site  CAC-----+-----+-----+-----+-----+      113
363 gen bank empty site CAC-----+-----+-----+-----+-----+      113
363 chimp          CAC-----+-----+-----+-----+-----+      113
363 galago         CATGCTTGAAGAATAATGGTTGGGTTTTCTTTTTTTTTTTGAGACAGAGCCTCAAG      165

Majority      -----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+
              170     180     190     200     210     220
-----+-----+-----+-----+-----+
363 human filled site  -----+-----+-----+-----+-----+      113
363 gen bank empty site -----+-----+-----+-----+-----+      113
363 chimp          -----+-----+-----+-----+-----+      113
363 galago         CTGTCCCCCTGGGTAGAGTGCCGTTGGCTTACAGCTCACAGCAACCTCCAATTCCT      220

Majority      -----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+
              230     240     250     260     270
-----+-----+-----+-----+-----+
363 human filled site  -----+-----+-----+-----+-----+      113
363 gen bank empty site -----+-----+-----+-----+-----+      113
363 chimp          -----+-----+-----+-----+-----+      113
363 galago         GGGCTCAAGCGAGTCTCTTGCCTCCGCCCTCCAAGTAGCTGGGACCACAGGCGCC      275

Majority      -----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+
              280     290     300     310     320     330
-----+-----+-----+-----+-----+
363 human filled site  -----+-----+-----+-----+-----+      113
363 gen bank empty site -----+-----+-----+-----+-----+      113
363 chimp          -----+-----+-----+-----+-----+      113
363 galago         CGCCACAACCCCCGGCTATTTTTTGGTTGCAGCTGTCATTTGTTGTTGGCGGGTC      330

Majority      -----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+
              340     350     360     370     380
-----+-----+-----+-----+-----+
363 human filled site  -----+-----+-----+-----+-----+      113
363 gen bank empty site -----+-----+-----+-----+-----+      113
363 chimp          -----+-----+-----+-----+-----+      113
363 galago         CGGGCTGGGGATTGCAACCCGCCACCTTAGGTGTACGTGGCTGGCGCCTTAGCCA      385

Majority      -----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+
              390     400     410     420     430     440
-----+-----+-----+-----+-----+
363 human filled site  -----+-----+-----+-----+-----+      144
363 gen bank empty site -----+-----+-----+-----+-----+      144
363 chimp          -----+-----+-----+-----+-----+      144
363 galago         GTTGAGCTATAGGCGCTGAGCCAA-----TGGTTGGGTTTCTTGAAG      427

Majority      GATGTCCTCAATTGGATTTGTCTGATGTTTTCTCTTGATTAGAAAACAGCT-
-----+-----+-----+-----+-----+
              450     460     470     480     490
-----+-----+-----+-----+-----+

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-----+-----+-----+-----+-----+-----
363 human filled site GATGTCCTTCAATTTGGATTTGCTCTGATGTTTTTCTCTTGATTAGAAAACAGCTT 199
363 gen bank empty site GATGTCCTTCAATTTGGATTTGCTCTGATGTTTTTCTCTTGATTAGAAAACAGCT- 198
363 chimp GATGTCCTTCAATTTGGATTTGCTCTGATGTTTTTCTCTTGATTAGAAAACAGCT- 198
363 galago GATGGACCTCAATATGAATTTTTTCTTATGTTTCTCTCTTGATTAGAAAGCAGTT- 481

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Majority

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-----+-----+-----+-----+-----+-----
          500      510      520      530      540      550
-----+-----+-----+-----+-----+-----
363 human filled site GGAACCACCCCAATGTCCAACAATGATAGACTGGATTAAGAAAATGTGGCACAT 254
363 gen bank empty site ----- 198
363 chimp ----- 198
363 galago ----- 481

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Majority

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-----+-----+-----+-----+-----+-----
          560      570      580      590      600
-----+-----+-----+-----+-----+-----
363 human filled site ATACACCATGGAATACTATGCAGCCATAAAAAATGTTGAGTTCATATCCTTTGTA 309
363 gen bank empty site ----- 198
363 chimp ----- 198
363 galago ----- 481

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Majority

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-----+-----+-----+-----+-----+-----
          610      620      630      640      650      660
-----+-----+-----+-----+-----+-----
363 human filled site GGGACATGGATGAAATGGAAACCATCATTCTCAGTAACTATCGCAAGAACAAA 364
363 gen bank empty site ----- 198
363 chimp ----- 198
363 galago ----- 481

```

Majority

```

-----+-----+-----+-----+-----+-----
          670      680      690      700      710
-----+-----+-----+-----+-----+-----
363 human filled site AAACCAAACACCGCATATTCTCACTCATAGGTGGGAATTGAACAATGAGATCACA 419
363 gen bank empty site ----- 198
363 chimp ----- 198
363 galago ----- 481

```

Majority

```

-----+-----+-----+-----+-----+-----
          720      730      740      750      760      770
-----+-----+-----+-----+-----+-----
363 human filled site TGGACACAGGAAGGGGAATATCACACTCTGGGGACTGTGGTGGGGTCGGGGGAGG 474
363 gen bank empty site ----- 198
363 chimp ----- 198
363 galago ----- 481

```

Majority

```

-----+-----+-----+-----+-----+-----
          780      790      800      810      820
-----+-----+-----+-----+-----+-----
363 human filled site GGGGAGGGATAGCATTGGGAGATATACCTAATGCTAGATGACACATTAGTGGGTG 529
363 gen bank empty site ----- 198
363 chimp ----- 198
363 galago ----- 481

```

Majority

```

-----+-----+-----+-----+-----+-----
          830      840      850      860      870      880
-----+-----+-----+-----+-----+-----
363 human filled site CAGGCACCAGCATGGCACATGTATACATATATAACTAACCTGCACAGTGTGCAC 584
363 gen bank empty site ----- 198
363 chimp ----- 198
363 galago ----- 481

```

Majority

```

-----+-----+-----+-----+-----+-----
          890      900      910      920      930
-----+-----+-----+-----+-----+-----
363 human filled site ATGTACCCTAAAACCTTAGAGTATAATAAAAAACAAACNAACCAACAAAAACCA 639
363 gen bank empty site ----- 198
363 chimp ----- 198

```

```

363 galago ----- 481
Majority -----ATGGGTTTTTGGTAAGGCACAGAGGTX
-----+-----+-----+-----+-----+
          940      950      960      970      980
-----+-----+-----+-----+-----+
363 human filled site ACNAACAACAAAAAGAAAAACAGCTATGGGTTTTTGGT-ANGCACAGAGGT 690
363 gen bank empty site -----ATGGGTTTTTGGTAAGGCACAGAGGT 224
363 chimp -----ATGGGTTTTTGGTAAGGCACAGAGGTA 225
363 galago -----CTGGGTTTTTGGTAAGGCACAGAGGT 507

```

L1HS411 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Tuesday, February 11, 2003 12:10 PM

```

Majority      ACACACACACG-ATGGAAA--GTATCTTCCTAGCTA-----CACACA
-----+-----+-----+-----+-----+
          10      20      30      40      50
-----+-----+-----+-----+-----+
411 genbank empty site ACACACACACG-ATGGAAA--GTATCTTCCTAAACACATACACACATA 47
411 chimp      ACACACACACG-ATGGAAA--GTATCTTCCTAAACA-----CA---- 35
411 pygmy chimp ACACACACACG-ATGGAAA--GTATCTTCCTAGCTA-----CACACA 39
411 gorilla    ACACACACACG-ATGGAAA--GTATCTTCCTAGCTA-----CACA-- 37
411 orangutan  ACACACACACG-ATGGAAA--GTATCTTCCTAACTA-----CACA-- 37
411 gmk        ACACACACAGGGATGGGAAAGGTATNTTCCTAGCTA-----CNCACA 42
411 omk        ACACACACACG-ATGGAAA--GTATCTTCCTAGCTA-----CACACA 39
411 galago     ACACACACANG-ATGGAAA--NTATCTTCCTAGCTA-----CACACA 39

```

```

Majority      CACACAG-ACACACACACACACACACATTGTTTTAGGCAG-ATGTTTT
-----+-----+-----+-----+-----+
          60      70      80      90      100
-----+-----+-----+-----+-----+
411 genbank empty site CACACAC-ACACACACACACACACACCGTTGTTTTAGGCAG-ATTTTTT 95
411 chimp      ----CAC-A----CACACACACACACACCGTTGTTTTAGGCAG-ATGTTTT 75
411 pygmy chimp CACACAG-ACACACATACACACACACACATTGTTTTAGGCAG-ATGTTTT 87
411 gorilla    CACACAC-AGACACACATACACACACACATTGTTTTAGGCAG-ATGTTTT 85
411 orangutan  --CACAC-ACACACACACACACGCACACATTGTTTTAGGCAG-ATGTTTT 83
411 gmk        CACACAG-ACACACACACACACACACATTATTTTTAGCCAGTATGTTTT 91
411 omk        CACACAG-ACACACATACACACACACACATTGTTTTAGGCAG-ATGTTTT 87
411 galago     CACACAGGACACACATACACACACACATTGTTTTAGGCAG-ATGTTTT 88

```

```

Majority      TGCAGAGGTAGGGGAAGAGAGGAAGATTTAGGATGTGCT
-----+-----+-----+-----+-----+
          110      120      130
-----+-----+-----+-----+-----+
411 genbank empty site TGCAGAGGCAAGGGGAAGAGAGGAAGATTTAGGATGTGCT 134
411 chimp      TGCAGAGGCAAGGGGAAGAGAGGAAGATTTAGGATGTGCT 114
411 pygmy chimp TGCAGAGGTAGGGGAAGAGAGGAAGATTTAGGATGTGCT 126
411 gorilla    TGCAGAGGTAGGGGAAGAGAGGAAGATTTAGGATGTGCT 124
411 orangutan  TGCAGAGGCAAGGGGAAGAGAGGAAGATTTAGGATGTGCT 122
411 gmk        TNCACAGGTA-GGGAATAGAGNAAGANTTNG 121
411 omk        TGCAGAGGTAGGGGAAGAGAGGAAGATTTAGGATGTGCT 126
411 galago     TGCAGAGGTAGGGGAANAGAGGAAGATTTAGCATGTGCT 127

```

L1HS413 alignment

Alignment Report of 'Untitled' - ClustalV (Weighted) : Tuesday, February 11, 2003 3:37 PM

```

Majority      TCATGAGCATCACTCTTACCATGTATCTTGAAGCTTTGTATCCAATTTAT
-----+-----+-----+-----+-----+
          10      20      30      40      50
-----+-----+-----+-----+-----+
413 human empty site TCATGAGCATCACTCTTACCATGTATCTTGAAGCTTTGTATCCAATTTAT 50
413 chimp      TCATGAGCATCACTCTTACCATGTATCTTGAAGCTTTGTATCCAATTTAT 50
413 spider monkey TCATGAGCATCACTCTTACCATGTATCTTGAAGCTTTGTATCCAATTTAT 50
413 woolly monkey TCATGAGCATCACTCTTACCATGTATCTTGAAGCTTTGTATCCAATTTAT 50
413 tamarin     TCATGAGCATCACTCTTACCATGTATCGTGAAGCTTTGTATCGAATTTAT 50
413 owl monkey TCATGAGCATCANTCTTACCATGTATCTTGAAGCTTTGTATCCAATTTAT 50

```

Majority GTTTTACTCGGTTTAGCTCCAAAATAGAAAACAGTTCACGGCCAGGTGCG
 -----+-----+-----+-----+-----+
 60 70 80 90 100
 -----+-----+-----+-----+-----+
 413 human empty site GTTTTACTCAGTTTAGCTCCA----- 71
 413 chimp GTTTTACTCAGTTTACCTCCA----- 71
 413 spider monkey GTTTTACTCGGTTTAGCTCCAAAACAGAAAACAATTCACGGCCAGGTGCG 100
 413 woolly monkey GTTTCACCTCGGTTTAGCTCCAAAACAGAAAACAATTCACAGCCAGGTGCG 100
 413 tamarin GTTTTACTTGGTTTAGCTCCAAAATAGAAAACAGTTCACGGCCAGGTGCA 100
 413 owl monkey GTTTTACTTGGTTTAGCTCCAAAATAGAAAACAGCTCACGGCCAGGTGCA 100

Majority GTGGCTCAGCCTGTAATCCCAGCCCTTTGGGAGGCTGAGGTAGGCAGAT
 -----+-----+-----+-----+-----+
 110 120 130 140 150
 -----+-----+-----+-----+-----+
 413 human empty site ----- 71
 413 chimp ----- 71
 413 spider monkey GTGGCTCAGCCTGTAATCCCAGCCCTTTGGGAGGCGGAGGTAGGCAGAT 150
 413 woolly monkey GTGGCTCAGCCTGTAATCCCAGCCCTTTGGGAGGCTGAGGTAGGCAGAT 150
 413 tamarin GTGGCTCAGCCTGTAATCCCAGCCCTTTGGGAGACCAAGTAAGCAGAT 150
 413 owl monkey GCGGCTCATGCCTGTAATCCCAGCCCTTTGGGAGGCTGAGGTAGGCAGAT 150

Majority CACGAGGTCAAGAGATGGAGACCATCCTAGTCAACATGGTGAAACCCCTGT
 -----+-----+-----+-----+-----+
 160 170 180 190 200
 -----+-----+-----+-----+-----+
 413 human empty site ----- 71
 413 chimp ----- 71
 413 spider monkey CACGAGGTCAAGAGATGGAGACCATCCTAGTAAACATGGTGAAACCCCTGT 200
 413 woolly monkey CACAAGTCAAGAGATAGAGACCATCCTAGTAAACATGGTGAAACCCCTGT 200
 413 tamarin CCGGAGGTCAAGAGATGGAGACCATCCTCATCAACATGGTGAAACCCCTGT 200
 413 owl monkey CATGAGGTCAAGAGTTGGAGACCATCCTAGTCAACACGGTGAAACCCCTGT 200

Majority CTTTACTAAAATGCAAAAATAGCCAGGTGTGGTGGTGTGTGCCTGTAGTC
 -----+-----+-----+-----+-----+
 210 220 230 240 250
 -----+-----+-----+-----+-----+
 413 human empty site ----- 71
 413 chimp ----- 71
 413 spider monkey CTTTACTAAAATGCAAAAATAGCCAGGTGTGGTGGTGTGTGCCTGTAGTC 250
 413 woolly monkey CTTTACGAAAATGCAAAAATAGCCAGGTGTGGTGGTGTGTGCCTGTAGTC 250
 413 tamarin CTTTACTAAAATGCAAAAATAGCCAGGTGTGGTGGTGTGTGCCTGTAGTC 250
 413 owl monkey CTTTACTAGAATGCAAAAATAGCCAGGTGTGGTGGTGTGTGCCTGTAGTC 250

Majority CCAGCTACTCGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGAGGCGG
 -----+-----+-----+-----+-----+
 260 270 280 290 300
 -----+-----+-----+-----+-----+
 413 human empty site ----- 71
 413 chimp ----- 71
 413 spider monkey CCAGCTACTCGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGAGGCGG 300
 413 woolly monkey CCAGCTACTCGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGAGGCGG 300
 413 tamarin CCAGCTACTCGGAGAGACCAGGCAGGAGAATCACTTGAACCTGGAGGCGG 300
 413 owl monkey CCAGCTACTCGGGAGGCCGAGGCAGGAGAATCACTTGAACCTGAAGGCAG 300

Majority ACATCGCAATGAGCGGAGGTTGCGCCACTGCCCTCCAAAGAAAACAGTTC
 -----+-----+-----+-----+-----+
 310 320 330 340 350
 -----+-----+-----+-----+-----+
 413 human empty site -----CAAAGAAAACAGTTC 87
 413 chimp -----CAAAGAAAACAGTTC 87
 413 spider monkey ACATAGCAATGAGCCGAGGTCACAACACTGCACTCCAAAGAAAACAGTTC 350
 413 woolly monkey ACATCGCAATGAGCCGAGGTTACAACACTGCACTCCAAAGAAAACAGTTC 350
 413 tamarin ACATTGCAATGAGTGGAGGTTGCGCCACTGCCCTCCAAAGAAAACAGTTC 350
 413 owl monkey ACATCGCAATGAGAGGAGGTCGCGCCACTGCCCTCCAAAGAAAACAGTTC 350

Majority ACTTCAATTAACATTTATGGCAAGTCAGCTGAGT
 -----+-----+-----+-----+-----+
 360 370 380
 -----+-----+-----+-----+-----+
 413 human empty site ACTTCAATTAACATTTATGGCAAGTCAGCTGAGT 121
 413 chimp ACTTCAATTAACATTTATGGCAAGTCAGCTGAGT 121
 413 spider monkey ACTTCAGTTAACATTTATGGCAAGTCAGCTGAGT 384
 413 woolly monkey ACTTCAATTAACATTTATGGCAAGTCAGCTGAGT 384
 413 tamarin AC---AATTAACATTTATGGCAAGTCAGCTGAGT 381
 413 owl monkey ACTTCAATTAACATTTATGGCAAGTCAGCTGAGT 384

L1HS413 Alu alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Tuesday, February 11, 2003 2:08 PM

```
Majority      -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA
              -----+-----+-----+-----+-----+
              10         20         30         40         50
              -----+-----+-----+-----+
AluSc         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluSg         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluSp         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluSq         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluSx         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluY          -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYc         -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYc3        -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYc5        -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYb8        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYa8        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYa5        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
413spiderAlu  AGAAAACAATTACAGGCCAGGTGCGGTGGCTCACGCCTGTAATCCAGCA      50
413woollyAlu  AGAAAACAATTACAGCCAGGTGCGGTGGCTCACGCCTGTAATCCAGCC      50
413 tamarinAlu AGAAAACAGTTACAGGCCAGGTGCAGTGGCTCACGCCTGTAATCCCAACC      50
413omkAlu     AGAAAACAGCTCACAGGCCAGGTGCAGCGCTCATGCCTGTAATCCAGCC      50
```

```
Majority      CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC
              -----+-----+-----+-----+-----+
              60         70         80         90         100
              -----+-----+-----+-----+
AluSc         CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluSg         CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluSp         CTTTGGGAGGCCGAGGCGGGCGGATCACCTGAGGTCGGGAGTTCGAGACC      86
AluSq         CTTTGGGAGGCCGAGGCGGGTGGATCACCTGAGGTCAGGAGTTCGAGACC      86
AluSx         CTTTGGGAGGCCGAGGCGGGCGGATCACCTGAGGTCAGGAGTTCGAGACC      86
AluY          CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYc         CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYc3        CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYc5        CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYb8        CTTTGGGAGGCCGAGGCGGGTGGATCAT--GAGGTCAGGAGATCGAGACC      84
AluYa8        CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYa5        CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
413spiderAlu  CTTTGGGAGGCCGAGGTAGGCAGATCAC--GAGGTCAAGAGATGGAGACC      98
413woollyAlu  CTTTGGGAGGCTGAGGTAGGCAGATCAC--AAGGTCAGGAGATAGAGACC      98
413 tamarinAlu CTTTGGGAGACCAAGGTAAAGCAGATCGC--GAGGTCAGGAGATGGAGACC      98
413omkAlu     CTTTGGGAGGCTGAGGTAAAGCAGATCAT--GAGGTCAGGAGATGGAGACC      98
```

```
Majority      ATCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-
              -----+-----+-----+-----+-----+
              110        120        130        140        150
              -----+-----+-----+-----+
AluSc         ATCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-      133
AluSg         AGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-      133
AluSp         AGCCTGACCAACATGGAGAAACCCCGTCTCTACTAAAAATACAAAAATT-      135
AluSq         AGCCTGGGCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-      135
AluSx         AGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-      135
AluY          ATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-      134
AluYc         A-----CGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-      122
AluYc3        A-----CGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-      122
AluYc5        A-----CGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-      122
AluYb8        ATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-      134
AluYa8        ATCCCGGCTAAACCGGTGAAACCCCGTCTCTACTAAACTACAAAAATT-      133
AluYa5        ATCCCGGCTAAACCGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-      134
413spiderAlu  ATCCTAGTAAACATGGTGAAACCCCTGTCTTTACTAAAA-TGCAAAAAT--      145
413woollyAlu  ATCCTAGTAAACATGGTGAAACCCCTGTCTTTACTAAAA-TGCAAAAAT--      145
413 tamarinAlu ATCCTCATCAACATGGTGAAACCCCTGTCTTTACTAAAA-TGCAAAAAT--      145
413omkAlu     ATCCTAGTCAACACGGTGAAACCCCTGTCTTTACTAGAA-TGCAAAAAT--      145
```

```
Majority      AGCCGGGCGTGGTGGCGGGCGCTGTAGTCCCAGCTACTCGG-GAGGCTG
              -----+-----+-----+-----+-----+
              160        170        180        190        200
              -----+-----+-----+-----+-----+

```


413woollyAlu	272
413 tamarinAlu	277
413omkAlu	277

L1HS443 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Tuesday, February 11, 2003 4:04 PM

```

Majority      -----
              +-----+-----+-----+-----+
              |         |         |         |         |
              |    10    |    20    |    30    |    40    |
              +-----+-----+-----+-----+
443 genbank empty site ----- 0
443 chimp     ----- 0
443 pygmy chimp ----- 0
443 gorilla expected product ----- 0
443 green monkey ----- 0
443 gorilla large product GCTAGACTCTCTACCTTTGGCTTTACTAAAAAGGTTTACTTCGTG 45
  
```

```

Majority      -----
              +-----+-----+-----+-----+
              |         |         |         |         |
              |    50    |    60    |    70    |    80    |    90    |
              +-----+-----+-----+-----+
443 genbank empty site ----- 0
443 chimp     ----- 0
443 pygmy chimp ----- 0
443 gorilla expected product ----- 0
443 green monkey ----- 0
443 gorilla large product GATATGATATAAAAATGCATTTCTATAAGAATTTCAATTCCTCCG 90
  
```

```

Majority      -----GCTAGACTCTCTACCTTTGGCTTTACTAAAAAGGTTTA
              +-----+-----+-----+-----+
              |         |         |         |         |
              |   100    |   110    |   120    |   130    |
              +-----+-----+-----+-----+
443 genbank empty site -----GCTAGACTCTCTACCTTTGGCTTTACTAAAAAGGTTTA 38
443 chimp     -----GCTAGACTCTCTACCTTTGGCTTTACTAAAAAGGTTTA 38
443 pygmy chimp -----GCTAGACTCTCTACCTTTGGCTTTACTAAAAAGGTTTA 38
443 gorilla expected product -----GCTAGACTCT-TACCTTTGGCTTTACTAAAAAGGTTTA 37
443 green monkey -----GCTAGACTCTCTACCTTTGGCTTTACTAAAAAGGTTTA 38
443 gorilla large product CCTATTAGCTAGACTCTCTACCTTTGGCTTTACTAAAAAGGTTTA 135
  
```

```

Majority      CTTTGTGGATATGATATAAAAATGCATTTCTATAAGAATTTTCAAT
              +-----+-----+-----+-----+
              |         |         |         |         |
              |   140    |   150    |   160    |   170    |   180    |
              +-----+-----+-----+-----+
443 genbank empty site CTTTGTGGATATGATATAAAAATGCATTTCTATAAGAATTTTCAAT 83
443 chimp     CTTTGTGGATATGATATAAAAATGCATTTCTATAAGAATTTTCAAT 83
443 pygmy chimp CTTTGTGGATATGATATAAAAATGCATTTCTATAAGAATTTTCAAT 83
443 gorilla expected product CTTTGTGGATATGATATAAAAATGCATTTCTATAAGAATTTTCAAT 82
443 green monkey CTTTATGAGGGGGATATAAAAATGCATTTCTATAAGAATTTTCAANT 83
443 gorilla large product CTTTGTGGATATGATATAAAAATGCATTTCTATAAGAATTTTCAAT 180
  
```

```

Majority      ATCACTTTAGGGTTTCTTTTAAAACATAAAAACAAGATTAGAAAAG
              +-----+-----+-----+-----+
              |         |         |         |         |
              |   190    |   200    |   210    |   220    |
              +-----+-----+-----+-----+
443 genbank empty site ATCACTTTAGGGTTTCTTTTAAAACATAAAAACAAGATTAGAAAAG 128
443 chimp     ATCACTTTAGGGTTTCTTTTAAAACATAAAAACAAGATTAGAAAAG 127
443 pygmy chimp ATCACTTTAGGGTTTCTTTTAAAACATAAAAACAAGATTAGAAAAG 127
443 gorilla expected product ATCACTTTAGGGTTTCTTTTAAAACATAAAAACAAGATTAGAAAAG 127
443 green monkey ATCACTTTAGGGGNTCTTTTAAAACATAAAAACAAGATTAGAAAAG 128
443 gorilla large product ATCACTTTAGGGTTTCTTTTAAAACATAAAAACAAGATTAGAAAAG 225
  
```

```

Majority      AGGAACTCTTAAAATAGCTATTCTATAAGCCTAAATAAAAATAAAA
              +-----+-----+-----+-----+
              |         |         |         |         |
              |   230    |   240    |   250    |   260    |   270    |
              +-----+-----+-----+-----+
443 genbank empty site AGGAACTCTTAAAATAGCTATTCTATAAGCCTAAATAAAAATAAAA 167
443 chimp     AGGAACTCTTAAAATAGCTATTCTATAAGCCTAAATAAAAATAAAA 172
443 pygmy chimp AGGAACTCTTAAAATAGCTATTCTATAAGCCTAAATAAAAATAAAA 172
443 gorilla expected product AGGAACTCTTAAAATAGCTATTCTATAAGCCTAAATAAAAATAAAA 172
443 green monkey AGGAACTCTTAAAATAGCTATTCTATAAGCCTAAATAAAAATAAAA 168
  
```

```

443 gorilla large product  AGGAACTCTTAAATAGCTATTCTATAAGCCTAAATAAAATAAAA 270
Majority                   CATCTTAATAATTTAACTTTTCTTTTAAAAA-TCAAAGACAATA
-----+-----+-----+-----+-----+
                        280      290      300      310
-----+-----+-----+-----+
443 genbank empty site    CATCTTGATAATTTAACTTTTCTTTTAAAAA-TCAAAGACAATA 211
443 chimp                  CATCTTAATAATTTAACTTTTCTTTTAAAAA-TCAAAGACAATG 216
443 pygmy chimp            CATCTTAATAATTTAACTTTTCTTTTAAAAA-TCAAAGACAATA 216
443 gorilla expected product CATCTTAATAATTTAACTTTTCTTTTAAAAA-TCAAAGACAATA 216
443 green monkey           CATCTTAATAATTTAAAGTTTTATTTTTAAAAAATCAAAGACAATA 213
443 gorilla large product  CATCTTAATAATTTAACTTTTCTTTTAAAAA-TCAAAGACAATA 314
Majority                   TATGGTTGCTCAATAAAGAAAAGTGGTGCATAGAGTCAGGTATCA
-----+-----+-----+-----+
                        320      330      340      350      360
-----+-----+-----+-----+
443 genbank empty site    TATGGTTGCTCAATAAAGAAAAGTGGTGCATAGAGTCAGGTATCA 256
443 chimp                  TATGGTTGCTCAATAAAGAAAAGTGGTGCATAGAGTCAGGTATCA 261
443 pygmy chimp            TATGGTTGCTCAATAAAGAAAAGTGGTGCATAGAGTCAGGTATCA 261
443 gorilla expected product TATGGTTGCTCAATAAAGAAAAGTGGTGCATAGAGTCAGGTATCA 261
443 green monkey           TATGTTTGCTTAATAAAGAAAAGTGGTGCATAGAGTCAGG-ACCA 257
443 gorilla large product  TATGGTTGCTCAATAAAGAAAAGTGGTGCATAGAGTCAGGTATCA 359

```

L1HS456 alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Wednesday, February 12, 2003 9:24 AM

```

Majority                   TAACACTTAGTGATTGCTGGGAGAGCTCTGCAGAGTATTTCACTATATTTT
-----+-----+-----+-----+
                        10      20      30      40      50
-----+-----+-----+-----+
456 genbank empty site    TAACACTTAGTGATTGCTGGGAGAGCTCTGCAGAGTATTTCACTATATTTT 50
456 orang                  TAACACTTAGTGATTGCTGGGAGAGCTCTGCAGAGTATTTCACTATATTTT 50
456 gmk                     TAACACTTAGTGATTGCTGGGAGAGCTATGCAGAGTATTTGCTATATTTT 50
Majority                   AGAATCAATGACACXA-----TACCTGGCACAAAGGA
-----+-----+-----+-----+
                        60      70      80      90     100
-----+-----+-----+-----+
456 genbank empty site    AGAATCAATGACACTA-----TACCTGGCACAAAGGA 82
456 orang                  AGAATCAATGACGCCA-----TACCTGGCACAAAGGA 82
456 gmk                     AGAATCAATGACACAAAGGAAATAAATAAATTTCTTTCCGGCACAAAGGA 100
Majority                   AATTCTTAATACATTCTAGTTTTTCCACTTCACCTTGTC
-----+-----+-----+-----+
                        110     120     130
-----+-----+-----+
456 genbank empty site    AATTCTTAATACATTCTAGTTTTTCCACTTCACCTTGTC 121
456 orang                  AATTCTTAATACATTCTAGTTTTTCCACTTCACCTTGTC 121
456 gmk                     AATACTAAAT---TCTAGTTTTTCCACTTCACCTTGTC 135

```

L1HS480 alignment

Alignment Report of 'Untitled' - ClustalV (Weighted) : Wednesday, February 12, 2003 10:20 AM

```

Majority                   AGAGGTAACCACTACCTTGCAACTTGTATTAGTCTTCCTTTTGCTTTTTA
-----+-----+-----+-----+
                        10      20      30      40      50
-----+-----+-----+-----+
480 human empty site      AGAGGTAACCACTACCTTGCAACTTGTATTAGTCTTCCTTTTGCTTTTTA 50
480 pygmy chimp            AGAGGTAACCACTACCTTGCAACTTGTATTAGTCTTCCTTTTGCTTTTTA 50
480 rhesus macaque         AGAGGTAACCACTACCTTGCAACTTGTATTAGTCTTCCTTTTGCTTTTTA 50
480 pig-tailed macaque     AGAGGTAACCACTACCTTGCAACTTGTATTAGTCTTCCTTTTGCTTTTTA 50
480 gmk                     AGAGGTAACCACTACCTTGCAACTTGCATGAGTCTTCCTTTTGCTTTTTA 50
480 omk                     AGAGGTAACCACTACCTTGCAACTTGTATTAGTCTTCCTTCACTTTTTA 50
Majority                   GAACTACAGTTTTACCATAACATAAATATTTCTTT-----
-----+-----+-----+-----+

```



```

-----+-----+-----+-----+-----+
              410       420       430       440       450
-----+-----+-----+-----+-----+
480 human empty site -AAAAGCATATTGGGTAGTTTTAGTTGTTTGTAACCTTTT----- 124
480 pygmy chimp      -AAAAGCATATTGGGTAGTTTTAGTTGTTTGTAACCTTTT----- 124
480 rhesus macaque  -AAAAGCATATTGGGTAGTTTTAGTTGTTTGTAACCTCTTTAAATGAGTT 134
480 pig-tailed macaque -AAAAGCATATTGGGTAGTTTTAGTTGTTTGTAACCTCTTTAAATGAGTT 134
480 gmk              -AAAAGCATATTGGGTAGTTTTAGTTGTTTGTAACCTCTTTAAATGAGTT 134
480 omk              AAAAAGCATATTGGGTAGTTTTAGTTGTTTGTAACCTTGT----- 440

Majority            TTGTGGGCC-GGCGCGGTGCCTCAAGCCTGTAATCCCAGCACTTTGGGAG
-----+-----+-----+-----+-----+
              460       470       480       490       500
-----+-----+-----+-----+-----+
480 human empty site ----- 124
480 pygmy chimp      ----- 124
480 rhesus macaque  TTGTGGGCCGCGCGGTGCCTCAAGCCTGTAATCCCAGCACTTTGGGAG 184
480 pig-tailed macaque TTGTGGGCCGCGCGGTGCCTCAAGCCTGTAATCCCAGCACTTTGGGAG 184
480 gmk              TTGTGGGCCAGGCGCGGTGCCTCAAGCCTGTAATCCCAGCACTTTGGGAG 184
480 omk              ----- 440

Majority            GCCGAGAC-GGCGGATCACGAGGTCAGGAGATCGAGTCCATCCTGGCTAA
-----+-----+-----+-----+-----+
              510       520       530       540       550
-----+-----+-----+-----+-----+
480 human empty site ----- 124
480 pygmy chimp      ----- 124
480 rhesus macaque  GCCGAGACGGGCGGATCACGAGGTCAGGAGATCGAGTCCATCCTGGCTAA 234
480 pig-tailed macaque GCCGAGACGGGCGGATCACGAGGTCAGGAGATCGAGTCCATCCTGGCTAA 234
480 gmk              GCCGAGACAGGCGGATCACGAGGTCAGGAGATCGAGTCCATCCTGGCTAA 234
480 omk              ----- 440

Majority            CACGGTGAAACCCCGTCTCTACTAAAAAATACAAAAAACTAGCCGGGCG
-----+-----+-----+-----+-----+
              560       570       580       590       600
-----+-----+-----+-----+-----+
480 human empty site ----- 124
480 pygmy chimp      ----- 124
480 rhesus macaque  CACGGTGAAACCCCGTCTCTACTAAAAAATACAAAAAACTAGCCGGGCG 284
480 pig-tailed macaque CACGGTGAAACCCCGTCTCTACTAAAAAATACAAAAAACTAGCCGGGCG 284
480 gmk              CACGGTGAAACCCCGTCTCTACTAAAAAATACAAAAAACTAGCCGGGCG 284
480 omk              ----- 440

Majority            AGGTGGC-GGCGCCTGTAGTCCCAGCTG-T-GGGAG-CTGAGGCAAGAGA
-----+-----+-----+-----+-----+
              610       620       630       640       650
-----+-----+-----+-----+-----+
480 human empty site ----- 124
480 pygmy chimp      ----- 124
480 rhesus macaque  AGGTGGCGGGCGCCTGTAGTCCCAGCTGCTTGGGAGTCTGAGGCAAGAGA 334
480 pig-tailed macaque AGGTGGCAGGCGCCTGTAGTCCCAGCTGTTGGGAGGCTGAGGCAAGAGA 334
480 gmk              AGGTGGCAGGCGCCTGTAGTCCCAGCTGCTCGGGAGGCTGAGGCAAGAGA 334
480 omk              ----- 440

Majority            ATGGC-TGAACC-GGGAGGCGGAGCTTGCAGTGAGCTGAGATC-GGCCAC
-----+-----+-----+-----+-----+
              660       670       680       690       700
-----+-----+-----+-----+-----+
480 human empty site ----- 124
480 pygmy chimp      ----- 124
480 rhesus macaque  ATGGCGTGAACCGGGAGGCGGAGCTTGCAGTGAGCTGAGATCTGGCCAC 384
480 pig-tailed macaque ATGGCATGAACCGGGAGGCGGAGCTTGCAGTGAGCTGAGATCTGGCCAC 384
480 gmk              ATGGCGTGAACCTGGGAGGCGGAGCTTGCAGTGAGCTGAGATCCGCCAC 384
480 omk              ----- 440

Majority            TGCCTCCAGCCTGGG-GACAGAGCGAGACTCTGTCTCAAAAAAT-AAAA
-----+-----+-----+-----+-----+
              710       720       730       740       750
-----+-----+-----+-----+-----+
480 human empty site -----AA 126
480 pygmy chimp      -----AA 126
480 rhesus macaque  TGCCTCCAGCCTGGGCGACAGAGCGAGACTCTGTCTCAAAAAATAAAAA 434
480 pig-tailed macaque TGCCTCCAGCCTGGGCGACAGAGCGAGACTCTGTCTCAAAAAATAAAAA 434
480 gmk              TGCCTCCAGCCTGGGAGACAGAGCGAGACTCTGTCTCAAAAAATAAAAA 434
480 omk              -----AA 442

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Majority      AATGAGTTTTGTGGTATATGTAACCTTTTGAGAGCTTAATTTTTATTCAA
-----+-----+-----+-----+-----+
              760      770      780      790      800
-----+-----+-----+-----+-----+
480 human empty site  AATGTGTTTTGTAGTACATGTAACCTTTTGAGAGCTTAATTTNTATTCAA      176
480 pygmy chimp      AATGTGTTTTGTAGTATATGTAACCTTTTGAGAGCTTAATTTTTATTCAA      176
480 rhesus macaque   AATGAGTTTTGTGGTATATGTAACCTTTTGAGAGCTTAATTTTTATTCAA      484
480 pig-tailed macaque AATGAGTTTTGTGGTATATGTAACCTTTTGCGAGCTTAATTTTTATTCAA      484
480 gmk              AATGAGTTTTGTGGTATATGTAACCTTTTGAGAGCTTAATTTTTATTCAA      484
480 omk              AATGAGTTTTGTGGTACATGTAACACTTTTGAGAGCTTAATTTTTAGTCAA      492

Majority      ATTATATTTCTAGCATCATTTATATTCATTTTCTTCCAGTAAGATATTT
-----+-----+-----+-----+-----+
              810      820      830      840      850
-----+-----+-----+-----+-----+
480 human empty site  ATTATATTTCTAGCATCGTTTATATTCATTTTCTTCCAGTAANNATTT      226
480 pygmy chimp      ATTATATTTCTAGCATCGTTTATATTCATTTTCTTCCAGTAAGATATTT      226
480 rhesus macaque   ATTACATTTCTAGCATCATTTATATTCATTTTCTTCCAGTAAGATATTT      534
480 pig-tailed macaque ATTACATTTCTAGCATCATTTATATTCATTTTCTTCCAGTAAGATATTT      534
480 gmk              ATTACATTTCTAGCATCATTTATATTCATTTTCTTCCAGTAAGATATTT      534
480 omk              ATTATATTTCTAGCATCATTTATGTTTCATTTTCTTATGGCAAGATATTT      542

Majority      TATTGTATGAAGGTACCACAATTTATCTCTTCTCCTGTCATGAGGC
-----+-----+-----+-----+-----+
              860      870      880      890
-----+-----+-----+-----+-----+
480 human empty site  TATTGTATGAAGGTACCACAATTTATCTCTTCTCCTGTCATGAGGC      272
480 pygmy chimp      TATTGTATGAAGGTACCACAATTTATCTCTTCTCCTGTCATGAGGC      272
480 rhesus macaque   TATTGTATGAAGGTACCACAATTTATCTCTTCTCCTGTCATGAGGC      580
480 pig-tailed macaque TATTGTATGAAGGTATCACAATTTATCTCTTCTCCTGTCATGAGGC      580
480 gmk              TATTGTATGAAGGTACCACAATTTATCTCTTCTCCTGTCATGAGGC      580
480 omk              CACTGTATGAATTTACCACAATTTATCTCTTCTCCTGTCATGAGGC      588

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L1HS480 Alu alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Wednesday, February 12, 2003 10:29 AM

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Majority      -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA
-----+-----+-----+-----+-----+
              10      20      30      40      50
-----+-----+-----+-----+-----+
AluSc         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
AluSg         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
AluSp         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
AluSq         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
AluSx         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
AluY          -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
AluYc         -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
AluYc3        -----RGCCGGGCGCGGTGGCTCACGCTTGTAAATCCCAGCA      36
AluYc5        -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
AluYb8        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
AluYa8        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
AluYa5        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCA      36
480 gmk AluY   AAATGAGTTTTGTGGGCCAGGCGCGGTGCCTCAAGCCTGTAATCCCAGCA      50
480 macaque AluY AAATGAGTTTTGTGGGCCAGGCGCGGTGCCTCAAGCCTGTAATCCCAGCA      50
480 rhesus AluY AAATGAGTTTTGTGGGCCAGGCGCGGTGCCTCAAGCCTGTAATCCCAGCA      50
480 omk AluSq  -----AAATAAATATT-TCTCTCCCAGCTGTAATCCCAGCA      35

Majority      CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC
-----+-----+-----+-----+-----+
              60      70      80      90      100
-----+-----+-----+-----+-----+
AluSc         CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluSg         CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATTCGAGACC      84
AluSp         CTTTGGGAGGCCGAGGCGGGCGGATCACCTGAGGTCGGGAGTTCGAGACC      86
AluSq         CTTTGGGAGGCCGAGGCGGGTGGATCACCTGAGGTCAGGAGTTCGAGACC      86
AluSx         CTTTGGGAGGCCGAGGCGGGCGGATCACCTGAGGTCAGGAGTTCGAGACC      86
AluY          CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYc         CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYc3        CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYc5        CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYb8        CTTTGGGAGGCCGAGGCGGGTGGATCAT--GAGGTCAGGAGATCGAGACC      84

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AluYa8	CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC	84
AluYa5	CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC	84
480 gmk AluY	CTTTGGGAGGCCGAGACAGGCGGATCAC--GAGGTCAGGAGATCGAGTCC	98
480 macaque AluY	CTTTGGGAGGCCGAGACAGGCGGATCAC--GAGGTCAGGAGATCGAGTCC	98
480 rhesus AluY	CTTTGGGAGGCCGAGACAGGCGGATCAC--GAGGTCAGGAGATCGAGTCC	98
480 omk AluSq	CTTTGGGAGACCAGCCAGGTGGATCAC--GAGGTCATGAGATCGAGACC	83

Majority ATCCTGGCTAACACGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT
 -----+-----+-----+-----+-----+
 -----+-----+-----+-----+-----+
 110 120 130 140 150

AluSc	ATCCTGGCCAACATGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	133
AluSg	AGCCTGGCCAACATGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	133
AluSp	AGCCTGGACCAACATGGAGAA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	135
AluSq	AGCCTGGCCAACATGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	135
AluSx	AGCCTGGCCAACATGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	135
AluY	ATCCTGGCTAACACGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	133
AluYc	A-----CGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	121
AluYc3	A-----CGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	121
AluYc5	A-----CGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	121
AluYb8	ATCCTGGCTAACAGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	133
AluYa8	ATCCCGGCTAAAACGGTGA AACCCCGTCTCTACTAAAAC-TACAAAAAAT	133
AluYa5	ATCCCGGCTAAAACGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	133
480 gmk AluY	ATCCTGGCTAACACGGTGA AACCCCGTCTCTACTAAAAAATACAAAAAA	148
480 macaque AluY	ATCCTGGCTAACACGGTGA AACCCCGTCTCTACTAAAAAATACAAAAAA	148
480 rhesus AluY	ATCCTGGCTAACACGGTGA AACCCCGTCTCTACTAAAAAATACAAAAAA	148
480 omk AluSq	ATCCTGGTCAACATGGTGA AACCCCGTCTCTACTAAAAA-TACAAAAAAT	132

Majority -TAGCCGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGGC
 -----+-----+-----+-----+-----+
 -----+-----+-----+-----+-----+
 160 170 180 190 200

AluSc	--AGCCGGGCGTGGTGGCGCGCCCTGTAGTCCCAGCTACTCGG-GAGGC	180
AluSg	--AGCCGGGCGTGGTGGCGCGCCCTGTAAATCCCAGCTACTCGG-GAGGC	180
AluSp	--AGCCGGGCGTGGTGGCGCATGCCTGTAAATCCCAGCTACTCGG-GAGGC	182
AluSq	--AGCCGGGCGTGGTGGCGGGCCCTGTAAATCCCAGCTACTCGG-GAGGC	182
AluSx	--AGCCGGGCGTGGTGGCGCGCCCTGTAAATCCCAGCTACTCGG-GAGGC	182
AluY	-TAGCCGGGCGTGGTGGCGGGCCCTGTAGTCCCAGCTACTCGG-GAGGC	181
AluYc	-TAGCCGGGCGCGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGGC	169
AluYc3	-TAGCCGGGCGCGGTGGCGGGCCCTGTAGTCCCAGCTACTCGGAGAGGC	170
AluYc5	-TAGCCGGGCGCAGTGGCGGGCCCTGTAGTCCCAGCTACTCGG-GAGGC	169
AluYb8	-TAGCCGGGCGCAGTGGCGGGCCCTGTAGTCCCAGCTACTCGG-GAGGC	181
AluYa8	--AGCCGGGCGTAGTGGCGGGCCCTGTAGTCTTAGTACTTGG-GAGGC	180
AluYa5	T-AGCCGGGCGTAGTGGCGGGCCCTGTAGTCCCAGCTACTTGG-GAGGC	181
480 gmk AluY	CTAGCCGGGCGAGGTGGCAGGGCCCTGTAGTCCCAGCTGCTTGG-GAGGC	197
480 macaque AluY	CTAGCCGGGCGAGGTGGCAGGGCCCTGTAGTCCCAGCTGTTTGG-GAGGC	197
480 rhesus AluY	CTAGCCGGGCGAGGTGGCAGGGCCCTGTAGTCCCAGCTGCTTGG-GAGGC	197
480 omk AluSq	-TAGTGGGCGCGGTGGCGCGTGCCTGTAAATCCCAGTTACTCAG-GAGGC	180

Majority TGAGGCAGGAGAATGGCGTGA ACCCGGGAGGCGGAGCTTGCAGTGAGCCG
 -----+-----+-----+-----+-----+
 -----+-----+-----+-----+-----+
 210 220 230 240 250

AluSc	TGAGGCAGGAGAATCGCTTGA ACCCGGGAGGCGGAGGTTGCAGTGAGCCG	230
AluSg	TGAGGCAGGAGAATCGCTTGA ACCCGGGAGGCGGAGGTTGCAGTGAGCCG	230
AluSp	TGAGGCAGGAGAATCGCTTGA ACCCGGGAGGCGGAGGTTGCGGTTGAGCCG	232
AluSq	TGAGGCAGGAGAATCGCTTGA ACCCGGGAGGCGGAGGTTGCAGTGAGCCG	232
AluSx	TGAGGCAGGAGAATCGCTTGA ACCCGGGAGGCGGAGGTTGCAGTGAGCCG	232
AluY	TGAGGCAGGAGAATGGCGTGA ACCCGGGAGGCGGAGCTTGCAGTGAGCCG	231
AluYc	TGAGGCAGGAGAATGGCGTGA ACCCGGGAGGCGGAGCTTGCAGTGAGCCG	219
AluYc3	TGAGGCAGGAGAATGGCGTGA ACCCGGGAGGCGGAGCTTGCAGTGAGCCG	220
AluYc5	TGAGGCAGGAGAATGGCGTGA ACCCGGAAGGCGGAGCTTGCAGTGAGCCG	219
AluYb8	TGAGGCAGGAGAATGGCGTGA ACCCGGGAAGGCGGAGCTTGCAGTGAGCCG	231
AluYa8	TGAGGCAGGAGAATGGCGTGA ACCCGGGAGGCGGAGCTTGCAGTGAGCCG	230
AluYa5	TGAGGCAGGAGAATGGCGTGA ACCCGGGAGGCGGAGCTTGCAGTGAGCCG	231
480 gmk AluY	TGAGGCAAGAGAATGGCGTGA ACCCTGGGAGGCGGAGCTTGCAGTGAGCTG	247
480 macaque AluY	TGAGGCAAGAGAATGGCATGA ACCCGGGAGGCGGAGCTTGCAGTGAGCTG	247
480 rhesus AluY	TGAGGCAAGAGAATGGCGTGA ACCCGGGAGGCGGAGCTTGCAGTGAGCTG	247
480 omk AluSq	TGAGGCAGGAGAATGCCTGA ACCCAGGAGGCGGAGGTTGCAGTGAGCTG	230

Majority AGATCGGCCACTGCACTCCA-----GCCTGGGCGACA-GAGCGAGAC
 -----+-----+-----+-----+-----+
 -----+-----+-----+-----+-----+
 260 270 280 290 300

AluSc	AGATCGGCCACTGCACTCCA-----GCCTGG-CGACA-GAGCGAGAC	271
AluSg	AGATCGGCCACTGCACTCCA-----GCCTGGGCGACA-GAGCGAGAC	272


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Majority          CACCATTCACCAGCAATTTCCACAACAGAAGAGTAATCCCTG
-----+-----+-----+-----+-----+
                   410       420       430       440
-----+-----+-----+-----+
509 human filled site CACCATTCACCAGCAATTTCCACAACAGAAGAGTAATCCCTG 440
509 chimp            CACCATTCACCAGCAATTTCCACAACAGAAGAGTAATCCCTG 130
509 pygmy chimp     CACCATTCACCAGCAATTTCCACAACAGAAGAGTAATCCCTG 130
509 gorilla         CACCATTCACCAGCAATTTCCACAACAGAAGAGTAATCCCTG 132
509 orangutan       CACCATTCACCAGCAATTTCCACAACAGAAGAGTAATCCCTG 130
509 green monkey    CACCATTCACCAGCAATTTCCACAACAGAAGAGTAATCCCTG 116

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L1HS521 alignment

Alignment Report of 'Untitled' - ClustalV (Weighted) : Wednesday, February 12, 2003 4:06 PM

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Majority          AAAGAGCAACCCTATACTTCATGCAAACACTACATAGCCTGTGGCATTTCATG
-----+-----+-----+-----+-----+
                   10       20       30       40       50
-----+-----+-----+-----+
521 genbank empty site AAAGAGCAACCCTATACTTCATGCAAACACTACATAGCCTGTGGCATTTCATG 50
521 chimp             AAAGAGCAACCCTATACTTCATGCAAACACTACATAGCCTGTGGCATTTCATG 50
521 orangutan        AAAGAGCAACCCTATACTTCATGCAAACACTACATAGCCTGTGGCATTTCACG 50
521 gmk small product AAAGAGCAACCCTATACTTCATGCAAACACTACATAGCCTGTGGCATTTCATG 50
521 macaque small product AAAGAGCAACCCTATACTTCATGCAAACACTACATAGCCTGTGGCATTTCATG 50
521 omk              AAAGAGCAACCCTATACTTCATGCAAACACTACACAGCCTGTGTCATTTCATG 50
521 gmk large product AAAGAGCAACCCTATACTTCATGCAAACACTACATAGCCTGTGGCATTTCATG 50
521 macaque large product AAAGAGCAACCCTATACTTCATGCAAACACTACATAGCCTGTGGCATTTCATG 50

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Majority          GAGTGACGAACAGAGAAAAAATAGTTTTAAAGTGCAAAGGAAACTGGAG
-----+-----+-----+-----+-----+
                   60       70       80       90      100
-----+-----+-----+-----+
521 genbank empty site TGGTGAAGAACAGAGAAAAAATAGTTTTAAAGTGCAAAGGAAACTGGAG 99
521 chimp             TAGTGAAGAACAGAGAAAAAATAGTTTTAAAGTGCAAAGGAAACTGGAG 99
521 orangutan        TTGTGAAGAACAGAGAAAAAATAGTTTTAAAGTGCAAAGGAAACTGGAG 99
521 gmk small product GAGTGATGAACAGAGAAAAAAGTTTTAAAGTGCAAAGGAAAC--GAG 98
521 macaque small product GAGTGACGAACAGAGAAAAAATAGTTTTGAAGTGCAAAGGTAACCTGGAG 100
521 omk              GAGTGACGAACAGAGAAAAAATAGTTTTAAAGTGCAAAGGAAACTGGAG 100
521 gmk large product GAGTGACGAACAGAGAAAAAATAGTTTTAAAGTGCAAAGGAAACTGGAG 100
521 macaque large product GAGTGACGAACAGAGAAAAAATAGTTTTAAAGTGCAAAGGAAACTGGAG 100

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Majority          ATTTTTTT-AAGGAAAATCAGT-----
-----+-----+-----+-----+
                   110      120      130      140      150
-----+-----+-----+-----+
521 genbank empty site ATTTTTTT-AAGGAAAATCAAT----- 120
521 chimp             ATTTTTTT-AAGGAAAATCAAT----- 120
521 orangutan        ATTTTTTT-AAGGAAAATCAAT----- 120
521 gmk small product ATTTTTTT-AAGGAAAATCAGT----- 119
521 macaque small product ATTTTTTT-AAGGAAAATCAGT----- 121
521 omk              ATTTTTTTAAGGAAAATCAGT----- 122
521 gmk large product ATTTTTTTA-AAGGAAAATCAGTAGCTGGGCGTGGTGGCTCACACCTGTAA 149
521 macaque large product ATTTTTTTA-AAGGAAAATCAGTAGCTGGGCGTGGTGGCTCACACCTGTAA 149

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```

Majority          -----
-----+-----+-----+-----+
                   160      170      180      190      200
-----+-----+-----+-----+
521 genbank empty site ----- 120
521 chimp             ----- 120
521 orangutan        ----- 120
521 gmk small product ----- 119
521 macaque small product ----- 121
521 omk              ----- 122
521 gmk large product TCCCAGCACTTTGGGAGGCCGAGGCCGGGATCACGAGGTCAGGAGATT 199
521 macaque large product TCCCAGCACTTTGGGAGGCCGAGGCCGGGATCACGAGGTCAGGAGATT 199

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Majority          -----
-----+-----+-----+-----+
                   210      220      230      240      250
-----+-----+-----+-----+

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L1HS521 Alu alignment

Alignment Report of 'Untitled' - ClustalV (Weighted) : Wednesday, February 12, 2003 4:11 PM

```
Majority      -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA
              -----+-----+-----+-----+-----+
              10      20      30      40      50
              -----+-----+-----+-----+
AluSc         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluSg         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluSp         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluSq         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluSx         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluY          -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYc         -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYc3        -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYc5        -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYb8        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYa8        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
AluYa5        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCAGCA      36
521 gmk AluY  AAAGGAAAATCAGTAGCTGGCGTGGTGGCTCACACCTGTAATCCAGCA      50
521 macaque AluY AAAGGAAAATCAGTAGCTGGCGTGGTGGCTCACACCTGTAATCCAGCA      50
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```
Majority      CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC
              -----+-----+-----+-----+
              60      70      80      90      100
              -----+-----+-----+-----+
AluSc         CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluSg         CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGTTCGAGACC      84
AluSp         CTTTGGGAGGCCGAGGCGGGCGGATCACCTGAGGTCGGGAGTTCGAGACC      86
AluSq         CTTTGGGAGGCCGAGGCGGGTGGATCACCTGAGGTCAGGAGTTCGAGACC      86
AluSx         CTTTGGGAGGCCGAGGCGGGCGGATCACCTGAGGTCAGGAGTTCGAGACC      86
AluY          CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYc         CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYc3        CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYc5        CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYb8        CTTTGGGAGGCCGAGGCGGGTGGATCAT--GAGGTCAGGAGATCGAGACC      84
AluYa8        CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
AluYa5        CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACC      84
521 gmk AluY  CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATTGAGACC      98
521 macaque AluY CTTTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATTGAGACC      98
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Majority      ATCCTGGCTAACACGGTGAACCCCGTCTCTACTAAAAATACAAAAAATT
              -----+-----+-----+-----+
              110     120     130     140     150
              -----+-----+-----+-----+
AluSc         ATCCTGGCCAACATGGTGAACCCCGTCTCTACTAAAAATACAAAAA-TT      133
AluSg         AGCCTGGCCAACATGGTGAACCCCGTCTCTACTAAAAATACAAAAA-TT      133
AluSp         AGCCTGACCAACATGGAGAAACCCCGTCTCTACTAAAAATACAAAAA-TT      135
AluSq         AGCCTGGCCAACATGGTGAACCCCGTCTCTACTAAAAATACAAAAA-TT      135
AluSx         AGCCTGGCCAACATGGTGAACCCCGTCTCTACTAAAAATACAAAAA-TT      135
AluY          ATCCTGGCTAACACGGTGAACCCCGTCTCTACTAAAAATACAAAAAATT      134
AluYc         -----ACGGTGAACCCCGTCTCTACTAAAAATACAAAAAATT      122
AluYc3        -----ACGGTGAACCCCGTCTCTACTAAAAATACAAAAAATT      122
AluYc5        -----ACGGTGAACCCCGTCTCTACTAAAAATACAAAAAATT      122
AluYb8        ATCCTGGCTAACAAAGTGAACCCCGTCTCTACTAAAAATACAAAAAATT      134
AluYa8        ATCCCGGCTAAAACGGTGAACCCCGTCTCTACTAAAATACAAAAAAT-      133
AluYa5        ATCCCGGCTAAAACGGTGAACCCCGTCTCTACTAAAAATACAAAAAATT      134
521 gmk AluY  ATCTTGGCTAACACAGTGAACCCCGTCTCTACTAAAAATACAAAAAATT      148
521 macaque AluY ATCTTGGCTAACACAGTGAACCCCGTCTCTACTAAAAATACAAAAAATT      148
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```
Majority      AGCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTG
              -----+-----+-----+-----+
              160     170     180     190     200
              -----+-----+-----+-----+
AluSc         AGCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTG      182
AluSg         AGCCGGGCGTGGTGGCGGGCGCCTGTAATCCCAGCTACTCGG-GAGGCTG      182
AluSp         AGCCGGGCGTGGTGGCGCATCCCTGTAATCCCAGCTACTCGG-GAGGCTG      184
AluSq         AGCCGGGCGTGGTGGCGGGCGCCTGTAATCCCAGCTACTCGG-GAGGCTG      184
AluSx         AGCCGGGCGTGGTGGCGGGCGCCTGTAATCCCAGCTACTCGG-GAGGCTG      184
AluY          AGCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTG      183
AluYc         AGCCGGGCGCGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTG      171
AluYc3        AGCCGGGCGCGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGGAGAGGCTG      172
AluYc5        AGCCGGGCGCAGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTG      171
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L1HS561 Alu alignment

Alignment Report of 'Untitled' - ClustalW (Slow/Accurate, IUB) : Wednesday, February 12, 2003 4:37 PM

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Majority      -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT
              -----+-----+-----+-----+-----+
              10         20         30         40         50
              -----+-----+-----+-----+
AluSc         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluSg         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluSp         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluSq         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluSx         -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluY          -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluYc         -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluYc3        -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluYc5        -----RGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluYb8        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluYa8        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
AluYa5        -----GGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      38
561 gorilla AluY AAGCAATCTTATGGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAAGCACT      50
  
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Majority      TTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCAT
              -----+-----+-----+-----+-----+
              60         70         80         90         100
              -----+-----+-----+-----+
AluSc         TTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCAT      86
AluSg         TTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCAG      86
AluSp         TTGGGAGGCCGAGGCGGGCGGATCACCTGAGGTCGGGAGTTCGAGACCAG      88
AluSq         TTGGGAGGCCGAGGCGGGTGGATCACCTGAGGTCAGGAGTTCGAGACCAG      88
AluSx         TTGGGAGGCCGAGGCGGGCGGATCACCTGAGGTCAGGAGTTCGAGACCAG      88
AluY          TTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCAT      86
AluYc         TTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCAC      86
AluYc3        TTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCAC      86
AluYc5        TTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCAC      86
AluYb8        TTGGGAGGCCGAGGCGGGTGGATCAT--GAGGTCAGGAGATCGAGACCAT      86
AluYa8        TTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCAT      86
AluYa5        TTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCAT      86
561 gorilla AluY TTGGGAGGCCGAGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCAT      98
  
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Majority      CCTGGCTAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAG
              -----+-----+-----+-----+-----+
              110        120        130        140        150
              -----+-----+-----+-----+
AluSc         CCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-AG      135
AluSg         CCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-AG      135
AluSp         CCTGGCCAACATGGGAGAAACCCCGTCTCTACTAAAAATACAAAAATT-AG      137
AluSq         CCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-AG      137
AluSx         CCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATT-AG      137
AluY          CCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAG      136
AluYc         -----GGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAG      124
AluYc3        -----GGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAG      124
AluYc5        -----GGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAG      124
AluYb8        CCTGGCTAACAAAGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAG      136
AluYa8        CCCGGCTAAAACGGTGAAACCCCGTCTCTACTAAAATACAAAAAT-AG      135
AluYa5        CCCGGCTAAAACGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAG      136
561 gorilla AluY CCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAG      148
  
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Majority      CCGGGCGTGGTGGCGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTGAG
              -----+-----+-----+-----+-----+
              160        170        180        190        200
              -----+-----+-----+-----+
AluSc         CCGGGCGTGGTGGCGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTGAG      184
AluSg         CCGGGCGTGGTGGCGGCGCCTGTAATCCCAGCTACTCGG-GAGGCTGAG      184
AluSp         CCGGGCGTGGTGGCGCATGCCTGTAATCCCAGCTACTCGG-GAGGCTGAG      186
AluSq         CCGGGCGTGGTGGCGGCGCCTGTAATCCCAGCTACTCGG-GAGGCTGAG      186
AluSx         CCGGGCGTGGTGGCGGCGCCTGTAATCCCAGCTACTCGG-GAGGCTGAG      186
AluY          CCGGGCGTGGTGGCGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTGAG      185
AluYc         CCGGGCGGCTGGCGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTGAG      173
AluYc3        CCGGGCGCGTGGCGGCGCCTGTAGTCCCAGCTACTCGGAGAGGCTGAG      174
AluYc5        CCGGGCGCAGTGGCGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTGAG      173
AluYb8        CCGGGCGCAGTGGCGGCGCCTGTAGTCCCAGCTACTCGG-GAGGCTGAG      185
  
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