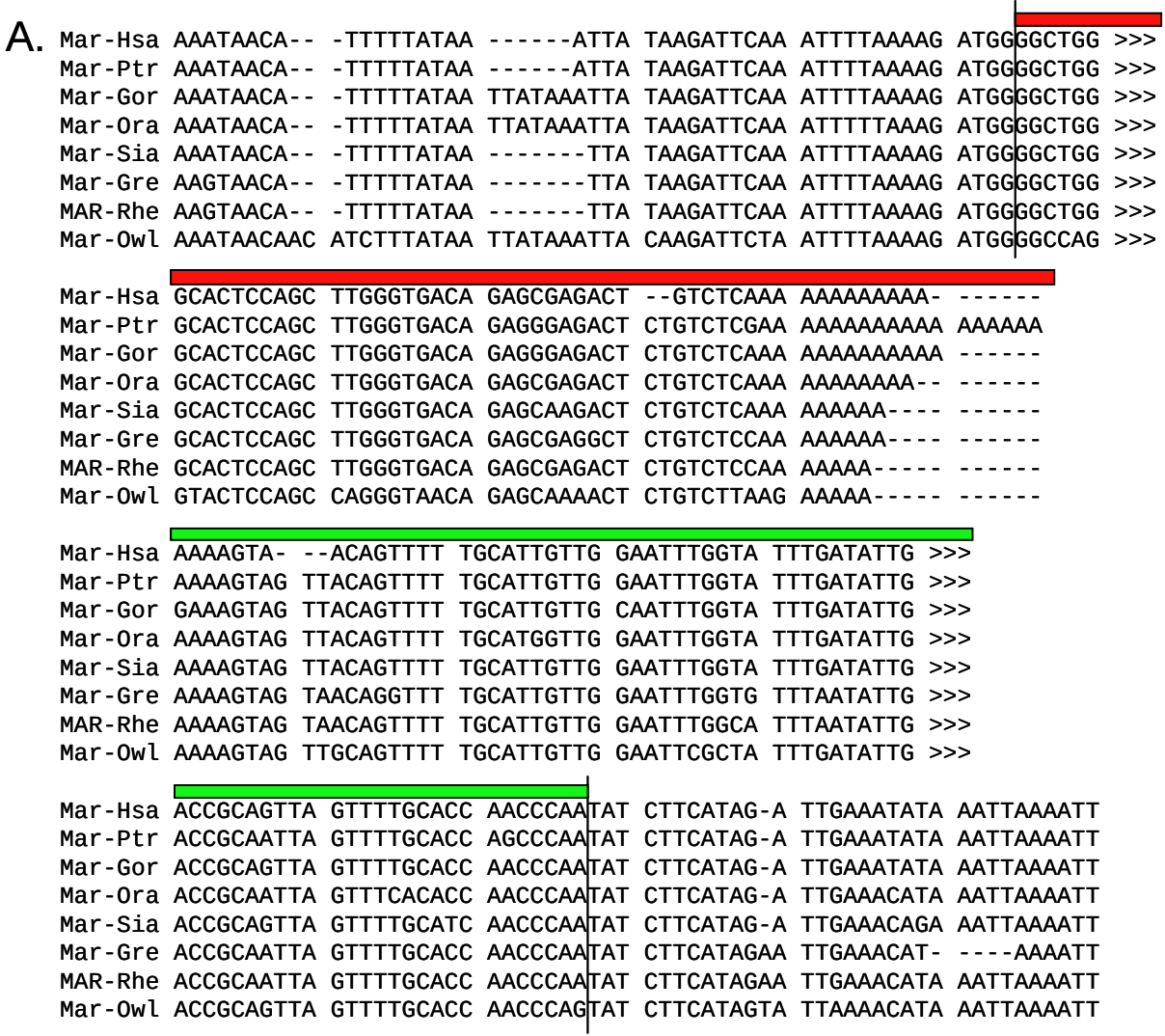
A.
Mar-Hsa AAATAACA-- -TTTTTATAA ------ATTA TAAGATTCAA ATTTTAAAAG ATGGGGCTGG >>>
Mar-Ptr AAATAACA-- -TTTTTATAA ------ATTA TAAGATTCAA ATTTTAAAAG ATGGGGCTGG >>>
Mar-Gor AAATAACA-- -TTTTTATAA TTATAAATTA TAAGATTCAA ATTTTAAAAG ATGGGGCTGG >>>
Mar-Ora AAATAACA-- -TTTTTATAA TTATAAATTA TAAGATTCAA ATTTTTAAAG ATGGGGCTGG >>>
Mar-Sia AAATAACA-- -TTTTTATAA -------TTA TAAGATTCAA ATTTTAAAAG ATGGGGCTGG >>>
Mar-Gre AAGTAACA-- -TTTTTATAA -------TTA TAAGATTCAA ATTTTAAAAG ATGGGGCTGG >>>
MAR-Rhe AAGTAACA-- -TTTTTATAA -------TTA TAAGATTCAA ATTTTAAAAG ATGGGGCTGG >>>
Mar-Owl AAATAACAAC ATCTTTATAA TTATAAATTA CAAGATTCTA ATTTTAAAAG ATGGGGCCAG >>>
Mar-Hsa GCACTCCAGC TTGGGTGACA GAGCGAGACT --GTCTCAAA AAAAAAAAA- ------
Mar-Ptr GCACTCCAGC TTGGGTGACA GAGGGAGACT CTGTCTCGAA AAAAAAAAAA AAAAAA
Mar-Gor GCACTCCAGC TTGGGTGACA GAGGGAGACT CTGTCTCAAA AAAAAAAAAA ------
Mar-Ora GCACTCCAGC TTGGGTGACA GAGCGAGACT CTGTCTCAAA AAAAAAAA-- ------
Mar-Sia GCACTCCAGC TTGGGTGACA GAGCAAGACT CTGTCTCAAA AAAAAA---- ------
Mar-Gre GCACTCCAGC TTGGGTGACA GAGCGAGGCT CTGTCTCCAA AAAAAA---- ------
MAR-Rhe GCACTCCAGC TTGGGTGACA GAGCGAGACT CTGTCTCCAA AAAAA----- ------
Mar-Owl GTACTCCAGC CAGGGTAACA GAGCAAAACT CTGTCTTAAG AAAAA----- ------
Mar-Hsa AAAAGTA- --ACAGTTTT TGCATTGTTG GAATTTGGTA TTTGATATTG >>>
Mar-Ptr AAAAGTAG TTACAGTTTT TGCATTGTTG GAATTTGGTA TTTGATATTG >>>
Mar-Gor GAAAGTAG TTACAGTTTT TGCATTGTTG CAATTTGGTA TTTGATATTG >>>
Mar-Ora AAAAGTAG TTACAGTTTT TGCATGGTTG GAATTTGGTA TTTGATATTG >>>
Mar-Sia AAAAGTAG TTACAGTTTT TGCATTGTTG GAATTTGGTA TTTGATATTG >>>
Mar-Gre AAAAGTAG TAACAGGTTT TGCATTGTTG GAATTTGGTG TTTAATATTG >>>
MAR-Rhe AAAAGTAG TAACAGTTTT TGCATTGTTG GAATTTGGCA TTTAATATTG >>>
Mar-Owl AAAAGTAG TTGCAGTTTT TGCATTGTTG GAATTCGCTA TTTGATATTG >>>
Mar-Hsa ACCGCAGTTA GTTTTGCACC AACCCAATAT CTTCATAG-A TTGAAATATA AATTAAAATT
Mar-Ptr ACCGCAATTA GTTTTGCACC AGCCCAATAT CTTCATAG-A TTGAAATATA AATTAAAATT
Mar-Gor ACCGCAGTTA GTTTTGCACC AACCCAATAT CTTCATAG-A TTGAAATATA AATTAAAATT
Mar-Ora ACCGCAATTA GTTTCACACC AACCCAATAT CTTCATAG-A TTGAAACATA AATTAAAATT
Mar-Sia ACCGCAGTTA GTTTTGCATC AACCCAATAT CTTCATAG-A TTGAAACAGA AATTAAAATT
Mar-Gre ACCGCAATTA GTTTTGCACC AACCCAATAT CTTCATAGAA TTGAAACAT- ----AAAATT
MAR-Rhe ACCGCAATTA GTTTTGCACC AACCCAATAT CTTCATAGAA TTGAAACATA AATTAAAATT
Mar-Owl ACCGCAGTTA GTTTTGCACC AACCCAGTAT CTTCATAGTA TTAAAACATA AATTAAAATT

B.

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MAR-Hsa CACTTC---T TTTGAGAGAA AACATTTAAA AATATACTTC CACTTGACTA TTATCCCATG
MAR-Tar CACGTCTATT T--------- ----TTTAAA AATATACTTC TGCTTGACTA TTATCCTATG
MAR-Dog CACTTCTGTT TTTGAGAACA AACATTAAAA GATATA---- TATTTTTTTA TTATCT----

MAR-Hsa ATAAAATAAC AT-----TTT TAT------A AATTATAAG- -ATTCAAATT TTAAAAGATG
MAR-Tar GTAAAATAAT ATAAAAGTTT TAT---TACA AATTACAAG- -ATTTGAATT TTTTAGAGTG
MAR-Dog -TAAAATA-T ATATAAACTT TACAACTAAA AAGTACTGCA AACTCGAAGT TTAAAAGGTG

MAR-Hsa G----GGCTG GGTGCAGTGG CTCACACCTG TAATCCCAGC ACTTTGGGAG GCTGAGGCAG >>>
MAR-Tar GCATG----- ---------- ---------- ---------- ---------- ---------- >>>
MAR-Dog GCATA----- ---------- ---------- ---------- ---------- ---------- >>>

MAR-Hsa AGCCTAGTTA TAATGATTTA AAATTCACAG TCCAAAACCG CAGTTAGTTT TGCACCAACC
MAR-Tar ---------- ---------- ---------- ---------- ---------- ----------
MAR-Dog ---------- ---------- ---------- ---------- ---------- ----------

MAR-Hsa CAATATCT-- -TCATAG-AT TGAAATATAA ATTAAAATTG CATTTGAAGT AGAT
MAR-Tar ---TATCTAG CTCATGGAAT TGAAACA--A ATAAAAATTG GCTTTAAAGT AAAT
MAR-Dog ---TATCT-- -TCATGAAAT TAAAACATAA A----AATTG GCTTTGAAGT CAAT
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C.

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SETex2-Tar   ATCAATTAGG CCGTTTCCTG GCCTCTCTCA GTGGGTGGGA ATGAGGGGGA ACTAAGCTTA
SETex2-Owl   ATCAGTT--- ---------- ---------- ----GTGGAA ATGAGAAGGA ACCCAGCATG
SETex2-Rhe   ATCAGTT--- ---------- ---------- ----GTGGAA ATGAGAAGGA ACCCAGCATG
SETex2-Gre   ATCAGTT--- ---------- ---------- ----GTGGAA ATGAGAAGGA ACCCAGCATG
SETex2-Sia   ATCAGTT--- ---------- ---------- ----GTGGAA ATGAGAAGGA ACCCAGCATG
SETex2-Ora   ATCAGTT--- ---------- ---------- ----GTGGAA ATGAGAAGGA ACCCAGCATG
SETex2-Gor   ATCAGGT--- ---------- ---------- ----GTGGAA ATGAGAAGGA ACCCAGCATG
SETex2-Ptr   ATCAGTT--- ---------- ---------- ----GTGGAC ATGAGAAGGA ACCCAGCATG
SETex2-Hsa   ATCAGTT--- ---------- ---------- ----GTGGAA ATGAGAAGGA ACCCAGCATG

SETex2-Tar   AGTGGCTCAG CCACTTCTGC CTTCCTCTCT TGCAAGCAGT TTATGCTCGA GGTAAGTCTG
SETex2-Owl   TGTGGCTCAG CCCCTTCTGT GTTCCCCTCC TGCAAGCGAT TGACCCTTGA GGTGAGTCTG
SETex2-Rhe   TGTGGCTCAG CCCCTTCTGT GTTCCCCTCC TGCAAGCGAT TGACCCTTGA GGTGAGTCTG
SETex2-Gre   TGTGGCTCAG CCCCTTCTGT GTTCCCCTCC TGCAAGCGAT TGACCCTTGA GGTGAGTCTG
SETex2-Sia   TGTGGCTCAG CCCCTTCTGT GTTCCCCTCC TGCAAGCGAT TGACCCTTGA GGTGAGTCTG
SETex2-Ora   TGTGGCTCAG CCCCTTCTGT GTTCCCCTCC TGCAAGCGAT TGACCCTTGA GGTGAGTCTG
SETex2-Gor   TGTGGCTCAG CCCCTTCTGT GTTCCCCTCC TGCAAGCGAT TGACCCTTGA GGTGAGTCTG
SETex2-Ptr   TGTGGCTCAG CCCCTTCTGT GTTCCCCTCC TGCAAGCGAT TGACCCTTGA GGTGAGTCTG
SETex2-Hsa   TGTGGCTCAG CCCCTTCTGT GTTCCCCTCC TGCAAGCGAT TGACCCTTGA GGTGAGTCTG
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Fig. 4. Alignment of the orthologous *MAR* region in nine primates and dog, in which the *Hsmar1* transposon is present (*A*) or absent (*B*), and alignment of the orthologous 3' end of the second exon of the *SET* gene in nine primate species (C). Hsa, human; Ptr, common chimpanzee; Gor, gorilla; Ora, orangutan; Sia, siamang; Gre, African green monkey; Rhe, rhesus macaque; Owl, owl monkey; Tar, tarsier; -, sequence gap; >>>, a portion of the sequence is not shown. The colored boxes above delimited alignment portions indicate the location of the *Alu*Sx insertion (red), the *Hsmar1* transposon insertion (green), the 3' end of SET exon 2 (orange), the 27-bp deletion in anthropoid primates relative to tarsier (blue), and the 77-bp exonized sequence linking the former SET exon 2 to the donor splice site of the second intron of *SETMAR* (yellow). The location of the SET stop codon in tarsier is shown in bold, and the start of intron 2 of *SETMAR* at dinucleotide GT is underlined in anthropoid primates.