Additional File 2: cDNA-based nucleotide alignment of the gene sequences. Element borders are indicated by vertical black lines, and are labeled above the sequence. Repeats are indicated by shaded boxes, which each different color (red = type 1; blue = type 2; green = type 3; yellow = type 4; and purple = type 5). Stop codons are shown in red boxes. The conserved splice signals are indicated by blue boxes. Conserved stretches in the alignment (minimum of 8 nt long, with a maximum average entropy of 0.02 and maximum entropy per position of 0.2) are indicated by green boxes above the alignment. Sites that are polymorphic in five of the eight sets are shown by red arrows; positions polymorphic in four of the eight sets are indicated by orange arrows.

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                                                Leader                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                Intron…
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                10        20        30        40        50        60        70        80        90        100       110       120       130       140       150       160       170       180
                                                ....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|
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2-07    ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCTCAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
2-08    ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCTCAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
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2-61    ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
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2-73    ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGGTA---TATTGAGCCAACAAAATTACTCACATAA-GTATAT-TG-TTATTTTGATTTATTATAATATGTGTTTCTAACTTGTTTGT 172
2-76    ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
2-77    ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCTCAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
2-79    ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
2-82    ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
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2-91    ATGGAGGTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGTTAAATATTAAGCCAACAAA-TGACTCACAGTA-GTATAT-T-ATTATTTTGATTTATTATAAAAGGTGTTTCTAACTTGTTTGT 176
2-95    ATGGAGGTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGGTA---TATTGAGCCAACAAAATTACTCACATAA-GTATAT-TG-TTATTTTGATTTATTATAATATGTGTTTCTAACTTGTTTGT 175
2-102   ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
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2-106   ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
2-107   ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGTTAAATATTAAGCCAACAAA-TGACTCACAGTA-GTATAT-T-ATTATTTTGATTTATTATAAAAGGTGTTTCTAACTTGTTTGT 173
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2-111   ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
2-115   ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
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2-118   ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGGTA---TATTGAGCCAACAAAATTACTCACATAA-GTATAT-TG-TTATTTTGATTTATTATAATATGTGTTTCTAACTTGTTTGT 172
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4-1503  ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGGTA---TATTGAGCCAACAAAATTACTCACATAA-GTATAT-TG-TTATTTTGATTTATTATAATATGTGTTTCTAACTTGTTTGT 172
4-1508  ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGGTA---TATTGAGCCAACAAAATTACTCACATAA-GTATAT-TG-TTATTTTGATTTATTATAATATGTGTTTCTAACTTGTTTGT 172
4-1511  ATGGAGGTGAAAGTGACACTGATCTTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCGCAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGG 177
4-1515  ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
4-1516  ATGGAGGTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCGCAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 177
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4-1523  ATGGAGGTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTCCTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 177
4-1528  ATGGAGGTGAAAGCAACACTGATCGTTGCCATTCTGGCTGTTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTTGGTATTACTTGATAAGTGGCAAATATTAAGCCAACAAAAGG-CTCACAGGA-GTATAT-T-ATTATTT-CATTTATCATAATATGTGTTTCTTACCTGTTTGT 175
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4-1531  ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGGTA---TATTGAGCCAACAAAATTACTCACATAA-GTATAT-TG-TTATTTTGATTTATTATAATATGTGTTTCTAACTTGTTTGT 172
4-1532  ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGGTA---TATTGAGCCAACAAAATTACTCACATAA-GTATAT-TG-TTATTTTGATTTATTATAATATGTGTTTCTAACTTGTTTGT 172
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4-1535  ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGGTA---TATTGAGCCAACAAAATTACTCACATAA-GTATAT-TG-TTATTTTGATTTATTATAATATGTGTTTCTAACTTGTTTGT 172
4-1536  ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCACAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 174
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4-1542  ATG---GTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCGGGTAAGAAATCAAATTATTACTCGGTATTCCTTCATAAGTGGTA---TATTGAGCCAACAAAATTACTCACATAA-GTATAT-TG-TTATTTTGATTTATTATAATATGTGTTTCTAACTTGTTTGT 172
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4-1544  ATGGAGGTGAAAGTGACACTGATCGTTGCCATTGTGGCTGCTCTTGCTATCTCAGGTAAGAAATCAAATTATTACTCGGTATTACTTGATAAGTGCTAAATATAGAGCCAACGAA-TAGCTCGCAGAA-GTATATATGATTATTT-CATATTTTATAATATGCATTTCTAAATTGTTCGT 177
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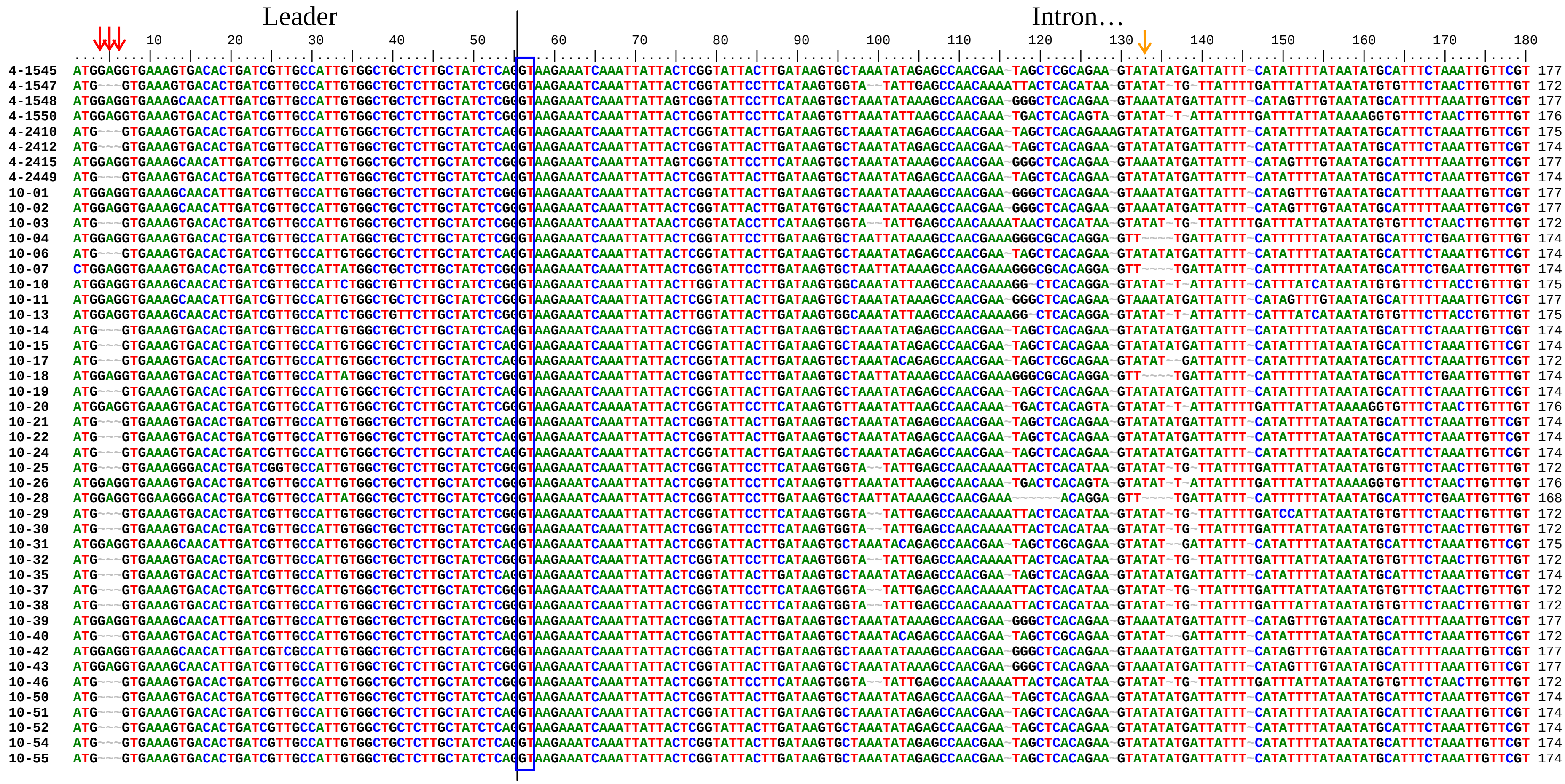
Leader
Intron…

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                190       200       210       220       230       240       250       260       270       280       290       300       310       320       330       340       350       360
                ....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|
2-05            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTCTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-06            TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT----------TTACGGATTAGGATTAAACA 338
2-07            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGCTAAACA 325
2-08            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGCTAAACA 325
2-09            TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT----------TTACGGATTAGGATTAAACA 338
2-11            AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATACTG-------GTAGAGTTAAACA 337
2-12            GACACAATAAAAAACAACATTTATT-CTGCGGCCTGCAGCATTCTTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
2-15            AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 339
2-17            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTATATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTATTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-18            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-20            GACACAATAAAAAACAACATTTATT-CTGCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
2-21            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGCTAAACA 325
2-24            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTCTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-25            GACACAATAAAAAACAACATTTATT-CTGCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
2-28            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-34            TACACAATACACA-AAATATTTCTT-CTGTGGGCTTCAGCATTCCGTTTATT----CGAATGAAAAAC-AAGTTTT--ATGTTTCTTTACCATCTGGTTTTCAAATTCATTTCGGTTGGAATTGGGCGTTTTGAATATCCAACCGCATGTAT----TCTG-------ATAGGGTTAAACT 332
2-35            AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
2-36            TACACAATACACA-AAATATTTCTT-CTGTGGGCTTCAGCATTCCGTTTATT----CGAATGAAAAAC-AAGTTTT--ATGTTTCTTTACCATCTGGTTTTCAAATTCATTTCGGTTGGAATTGGGCGTTTTGAATATCCAACCGCATGTAT----TCTG-------ATAGGGTTAAACT 332
2-37            AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
2-38            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-47            AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
2-50            GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGTTTTTTCTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
2-52            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTCTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-55            TACACAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCTGTTGGT----CGAATGGCAAAAGATAAGAATTCTCTTTATGTTCAACCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 323
2-56            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-57            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-59            GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGTTTTTTCTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 340
2-61            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-63            AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 339
2-64            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGCTAAACA 325
2-65            GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGTTTTTTCTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 340
2-66            TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT----------TTACGGATTAGGATTAAACA 338
2-67            AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
2-73            GACACAATAAAAAACAACATTTATT-CTGCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
2-76            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-77            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGCTAAACA 325
2-79            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-82            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-84            GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGTTTTTTCTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 340
2-90            AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 339
2-91            AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 339
2-95            GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGTTTTTTCTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 340
2-102           TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-103           TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT----------TTACGGATTAGGATTAAACA 338
2-105           AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 339
2-106           TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-107           AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 338
2-109           TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 328
2-111           TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-115           TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
2-116           GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGTTTTTTCTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 340
2-118           GACACAATAAAAAACAACATTTATT-CTGCGGCCTGCAGCATTCTTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
2-119           GACACAATAAAAAACAACATTTATT-CTGCGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
4-1501          TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
4-1503          GACACAATAAAAAATAACATTTATT-CTACGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 336
4-1508          GACACAATAAAAAATAACATTTATT-CTACGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 336
4-1511          TACACAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGT----CGAATGGCAAAAGATAAGAATTCTCTTAATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCAAACCGA----------------TAGGGTTAAACA 328
4-1515          TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAATTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
4-1516          TACACAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGT----CGAATGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAATCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 328
4-1517          GACACAATAAAAAATAACATTTATT-CTACGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 336
4-1520          GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
4-1521          TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT----------TTACGGATTAGGATTAAACA 338
4-1523          TACACAGTATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGT----CGAATGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------CAGGGTTAAACA 328
4-1528          TACACAATACACA-AAATATTTCTT-CTGTGGGCTTCAGCATTCCGTTTATT----CGAATGAAAAAC-ACGTTTT--ATGTTTCTTTACCATCTGGTTTTCAAATTCATTTCGGTTGGAATTGGGCGTTTTGAATATCCAACCGCATGTAT----TCTG-------ATAGGGTTAAACT 335
4-1530          TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 329
4-1531          GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
4-1532          GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
4-1533          GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
4-1534          TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT----------TTACGGATTAGGATTAAACA 338
4-1535          GACACAATAAAAAATAACATTTATT-CTACGGCCTGCAGCATTCTGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCACGCATTCTG-------GTAGAGTTAAACA 336
4-1536          TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 325
4-1538          TACACAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGT----CGAATGGCAAAAGATAAGAATTCTCTTAATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCAAACCGA----------------TAGGGTTAAACA 328
4-1542          GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
4-1543          TACACAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGT----CGAATGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAATCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACG 328
4-1544          TACACAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGT----CGAATGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAATCAGAATTAGGCGTTTTGAATATCGAACCGA----------------TAGGGTTAAACA 328
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…Intron…

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                 190       200       210       220       230       240       250       260       270       280       290       300       310       320       330       340       350       360
                 ....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|
4-1545           TACACAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGT-----CGAATGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAATCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAAACA 328
4-1547           GACACAATAAAAAATAACATTTATT-CTACGGCCTGCAGCATTCTGTTTTTTTT-----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 336
4-1548           TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC-----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT-----------TTACGGATTAGGATTAAACA 338
4-1550           AACACAATAAAAA-TAACATTTATT-CTTCGGCCTGCAGCATTCTGTTGTTTTTT-----ATGAAAAAA-ATGTTTC--ATGGTTCTTTACAATCTGGTTTTCAAATTGAATTCGTTTAGAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 340
4-2410           TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAAACA 326
4-2412           TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAATTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAAACA 325
4-2415           TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC-----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT-----------TTACGGATTAGGATTAAACA 338
4-2449           TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAATTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAAACA 325
10-01            TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC-----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT-----------TTACGGATTAGGATTAAACA 338
10-02            TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC-----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT-----------TTACGGATTAGGATTAAACA 338
10-03            GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGGTTTTTTTT-----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
10-04            TACACAATATAA-TTAAC-TTTATTTCTTAAACCTACACCAATCCGTTGGT-----CGAATGACAAAAGATGTGTATTATCTTTATGTTCAATCTGGTATTCAAATTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACAACAT-----------TTGAGGAGTAAAGTTAAACA 335
10-06            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAAACA 325
10-07            TACACAATATAA-TTAAC-TTTATTTCTTAAACCTACACCAATCCGTTGGT-----CGAATGACAAAAGATGTGTATTATCTTTATGTTCAATCTGGTATTCAAATTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACAACAT-----------TTGAGGAGTAAAGTTAAACA 335
10-10            TACACAATACACA-AAATATTTCTT-CTGTGGGCTTCAGCATTCCGTTTATT-----CGAATGAAAAAC-ACGTTTT--ATGTTTCTTTACCATCTGGTTTTCAAATTCATTTCGGTTGGAATTGGGCGTTTTGAATATCCAACCGCATGTAT----TCTG-------ATAGGGTTAAACT 335
10-11            TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC-----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT-----------TTACGGATTAGGATTAAACA 338
10-13            TACACAATACACA-AAATATTTCTT-CTGTGGGCTTCAGCATTCCGTTTATT-----CGAATGAAAAAC-ACGTTTT--ATGTTTCTTTACCATCTGGTTTTCAAATTCATTTCGGTTGGAATTGGGCGTTTTGAATATCCAACCGCATGTAT----TCTG-------ATAGGGTTAAACT 335
10-14            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAAACA 325
10-15            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAA-CA 324
10-17            TACACAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCTGTTGGT-----CGAATGGCAAAAGATAAGAATTCTCTTTATGTTCAACCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAAACA 323
10-18            TACACAATATAA-TTAAC-TTTATTTCTTAAACCTACACCAATCCGTTGGT-----CGAATGACAAAAGATGTGTATTATCTTTATGTTCAATCTGGTATTCAAATTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACAACAT-----------TTGAGGAGTAAAGTTAAACA 335
10-19            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAA-CA 324
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10-24            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAA-CA 324
10-25            GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
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10-28            TACACAATATAA-TTAAC-TTTATTTCTTAAACCTACACCAATCCGTTGGT-----CGAATGACAAAAGATGTGTATTATCTTTATGTTCAATCTGGTATTCAAATTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACAACAT-----------TTGAGGAGTAAAGTTAAACA 329
10-29            GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
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10-43            TACACAATATAA-TTAAT-TGTATTTATTAAGCCTACACCAATCCGTTTTC-----TGAATGACAAAGGATGTGTATTATGTTTACGTTCAATCTGGTAATCAAATTTAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGCAT-----------TTACGGATTAGGATTAAACA 338
10-46            GACACAATAAAAAATAACATTTATT-CTGCGGCCTGCAGCATTCTGGTTTTTTTT----ATGAAAAAA-ATGTTTC--ATGGTACTTTACAATCTGGTTTTCAAATTCAATTCGGTTAAAATTAGGCGTTTTGAATATCCAACCGCATGCATGCATTCTG-------GTAGAGTTAAACA 337
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10-52            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAAACA 325
10-54            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAAACA 325
10-55            TACAAAATATAA-TTTAT-ATTATTTCTTAAGCCTACACCAATCCGTTGGG-----CGAGTGGCAAAAGATAAGAATTATCTTTATGTTCAATCTGGTATTCAAGTTCAATTCAGTCAGAATTAGGCGTTTTGAATATCGAACCGA-------------------TAGGGTTAAACA
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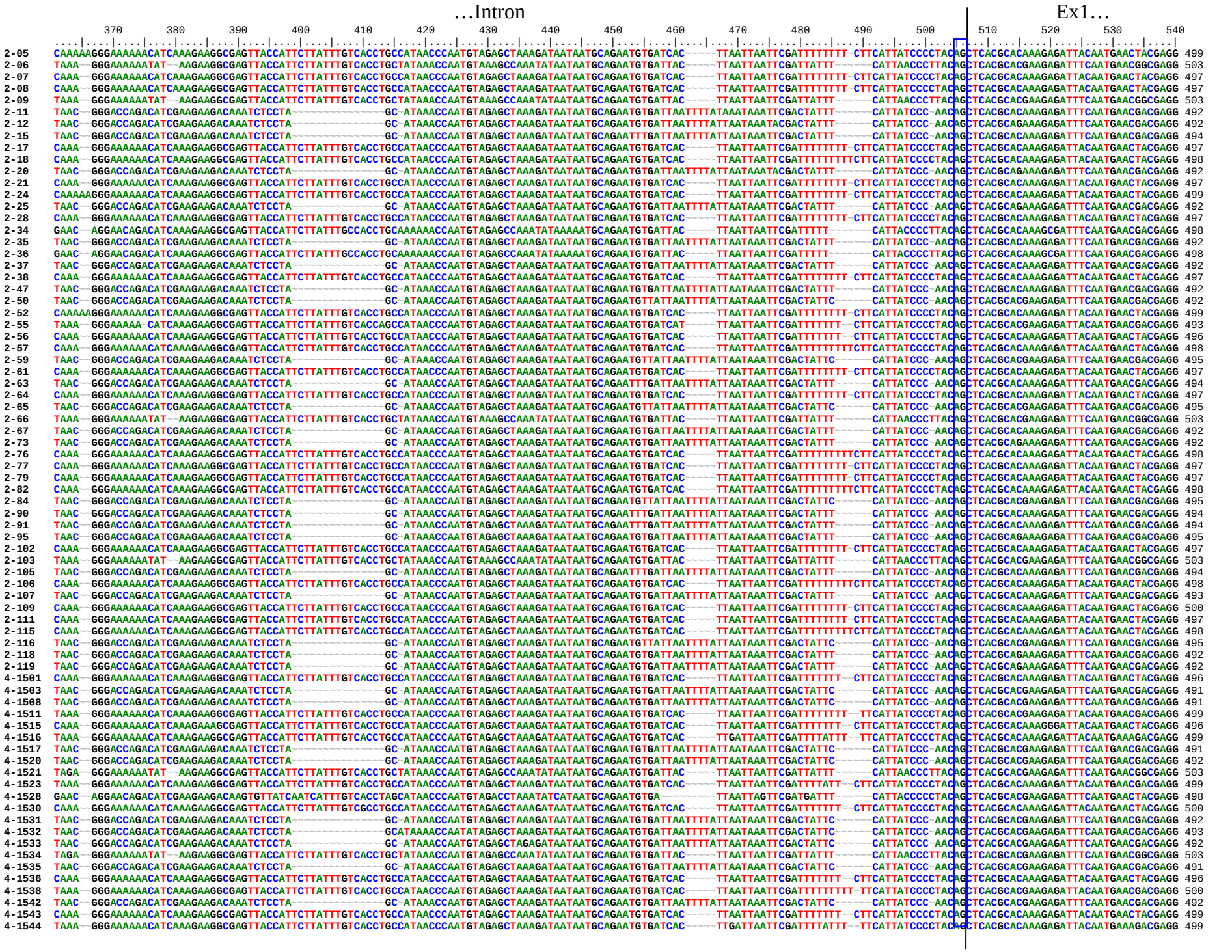
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2-06 TAAA GGGAAAAAATAT AAGAAGGCGAGTTACCATTCTTATTTGTCACCTGCTATAAACCAATGTAAAGCCAAATATAATAATGCAGAATGTGATTAC TTAATTAATTCGATTATTT CATTAACCCTTACAGCTCACGCACGAAGAGATTTCAATGAACGGCGAGG 503
2-07 CAAA GGGAAAAAACATCAAAGAAGGCGAGTTACCATTCTTATTTGTCACCTGCCATAACCCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATCAC TTAATTAATTCGATTTTTTTT CTTCATTATCCCCTACAGCTCACGCACAAAGAGATTACAATGAACTACGAGG 497
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2-11 TAAC GGGACCAGACATCGAAGAAGACAAATCTCCTA GC ATAAACCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATTAATTTTATAATAAATCGACTATTT CATTATCCC AACAGCTCACGCACAAAGAGATTTCAATGAACGACGAGG 492
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2-20 TAAC GGGACCAGACATCGAAGAAGACAAATCTCCTA GC ATAAACCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATTAATTTTATTAATAAATACGACTATTT CATTATCCC AACAGCTCACGCAGAAAGAGATTTCAATGAACGACGAGG 492
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2-24 CAAAAAGGGAAAAAACATCAAAGAAGGCGAGTTACCATTCTTATTTGTCACCTGCCATAACCCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATCAC TTAATTAATTCGATTTTTTTT CTTCATTATCCCCTACAGCTCACGCACAAAGAGATTACAATGAACTACGAGG 499
2-25 TAAC GGGACCAGACATCGAAGAAGACAAATCTCCTA GC ATAAACCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATTAATTTTATTAATAAATTCGACTATTT CATTATCCC AACAGCTCACGCAGAAAGAGATTTCAATGAACGACGAGG 492
2-28 CAAA GGGAAAAAACATCAAAGAAGGCGAGTTACCATTCTTATTTGTCACCTGCCATAACCCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATCAC TTAATTAATTCGATTTTTTTT CTTCATTATCCCCTACAGCTCACGCACAAAGAGATTACAATGAACTACGAGG 497
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2-36 GAAC AGGAACAGACATCAAAGAAGGCGAGTTACCATTCTTATTTGCCACCTGCAAAAAACCAATGTAGAGCCAAATATAAAAATGCAGAATGTGATTAC TTAATTAATTCGATTTTT CATTACCCCTTACAGCTCACGCACAAAGCGATTTCAATGAACGACGAGG 498
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2-38 CAAA GGGAAAAAACATCAAAGAAGGCGAGTTACCATTCTTATTTGTCACCTGCCATAACCCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATCAC TTAATTAATTCGATTTTTTTT CTTCATTATCCCCTACAGCTCACGCACAAAGAGATTACAATGAACTACGAGG 497
2-47 TAAC GGGACCAGACATCGAAGAAGACAAATCTCCTA GC ATAAACCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATTAATTTTATTAATAAATTCGACTATTT CATTATCCC AACAGCTCACGCACAAAGAGATTTCAATGAACGACGAGG 492
2-50 TAAC GGGACCAGACATCGAAGAAGACAAATCTCCTA GC ATAAACCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATTAATTTTATTAATAAATTCGACTATTC CATTATCCC AACAGCTCACGCACGAAGAGATTTCAATGAACGACGAGG 492
2-52 CAAAAAGGGAAAAAACATCAAAGAAGGCGAGTTACCATTCTTATTTGTCACCTGCCATAACCCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATCAC TTAATTAATTCGATTTTTTTT CTTCATTATCCCCTACAGCTCACGCACAAAGAGATTACAATGAACTACGAGG 499
2-55 TAAA GGGAAAAA CATCAAAGAAGGCGAGTTACCATTCTTATTTGTCACCAGCCATAACCCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATCAT TTAATTAATTCGATTTTTTT CTTCATTATCCCCTACAGCTCACGCACGAAGAGATTACAATGAACGACGAGG 493
2-56 CAAA GGGAAAAAACATCAAAGAAGGCGAGTTACCATTCTTATTTGTCACCTGCCATAACCCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATCAC TTAATTAATTCGATTTTTTT CTTCATTATCCCCTACAGCTCACGCACAAAGAGATTACAATGAACTACGAGG 496
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2-59 TAAC GGGACCAGACATCGAAGAAGACAAATCTCCTA GC ATAAACCAATGTAGAGCTAAAGATAATAATGCAGAATGTTATTAATTTTATTAATAAATTCGACTATTC CATTATCCC AACAGCTCACGCACGAAGAGATTTCAATGAACGACGAGG 495
2-61 CAAA GGGAAAAAACATCAAAGAAGGCGAGTTACCATTCTTATTTGTCACCTGCCATAACCCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATCAC TTAATTAATTCGATTTTTTT CTTCATTATCCCCTACAGCTCACGCACAAAGAGATTACAATGAACTACGAGG 497
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4-1542 TAAC GGGACCAGACATCGAAGAAGACAAATCTCCTA GC ATAAACCAATGTAGAGCTAAAGATAATAATGCAGAATGTGATTAATTTTATTAATAAATTCGACTATTC CATTATCCC AACAGCTCACGCACGAAGAGATTTCAATGAACGACGAGG 492
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…Intron | Ex1…

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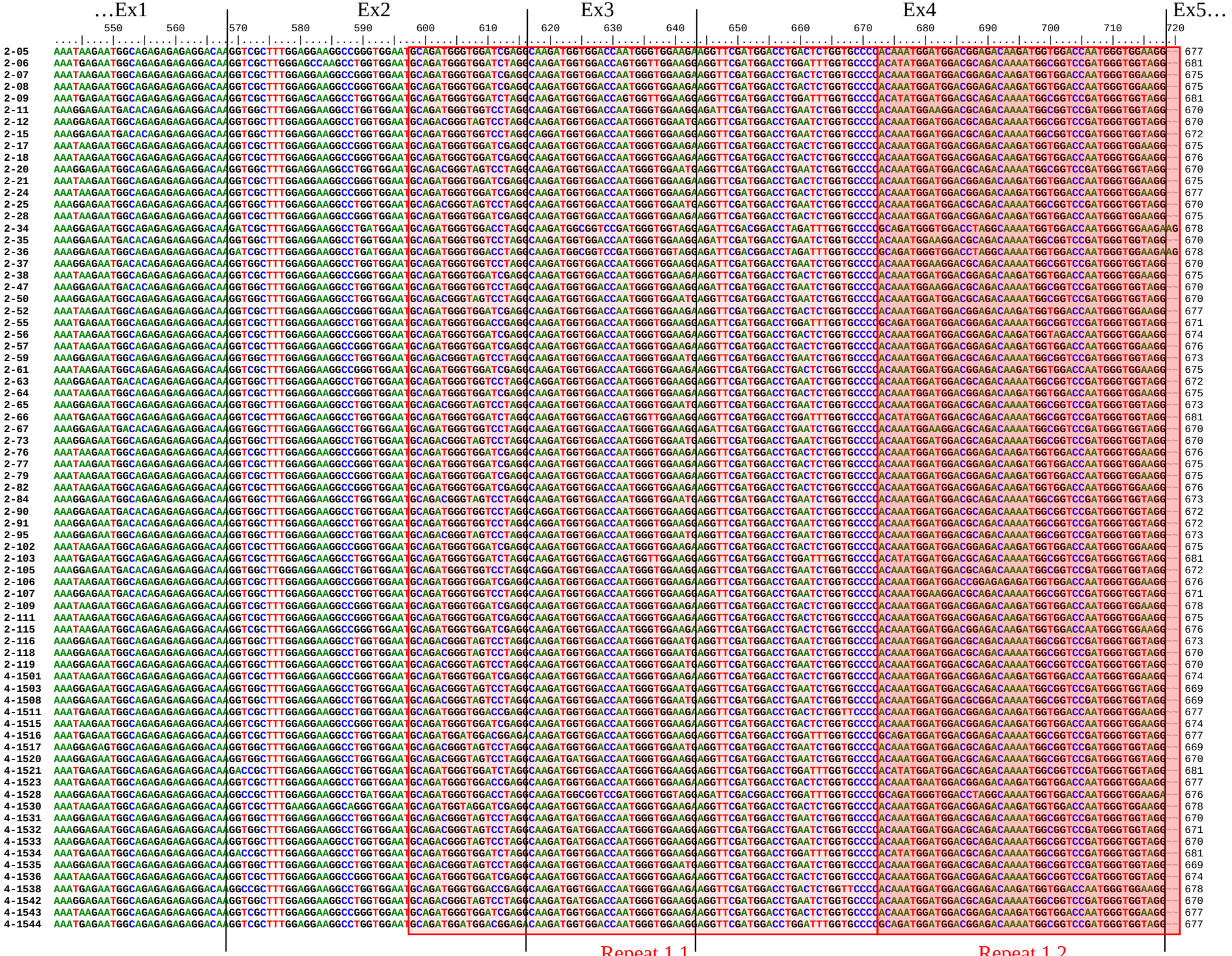
…Ex1
Ex2
Ex3
Ex4
Ex5…
550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720
2-05 677
2-06 681
2-07 675
2-08 675
2-09 681
2-11 670
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2-15 672
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4-1530 678
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4-1534 681
4-1535 669
4-1536 674
4-1538 678
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4-1543 677
4-1544 677
Repeat 1.1
Repeat 1.2…

…Ex1 | Ex2 | Ex3 | Ex4 | Ex5…

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                 550       560       570       580       590       600       610       620       630       640       650       660       670       680       690       700       710       720
                 ....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|
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4-1550           AAAGGGAGAATGACACAGAGAGAGGACAAGGTGGCTTTGGAGGAAGGCCTGGTGGAATGCAGATGGGTGGTCCTAGGCAAGATGGTGGACCAATGGGTGGAAGGAGGTTCGATGGACCTGAATCTGGTGCCCCACAAATGGAAGGACGCAGACAAAATGGCGGTCCGATGGGTGGTAGG-- 673
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Ex6
Ex7…
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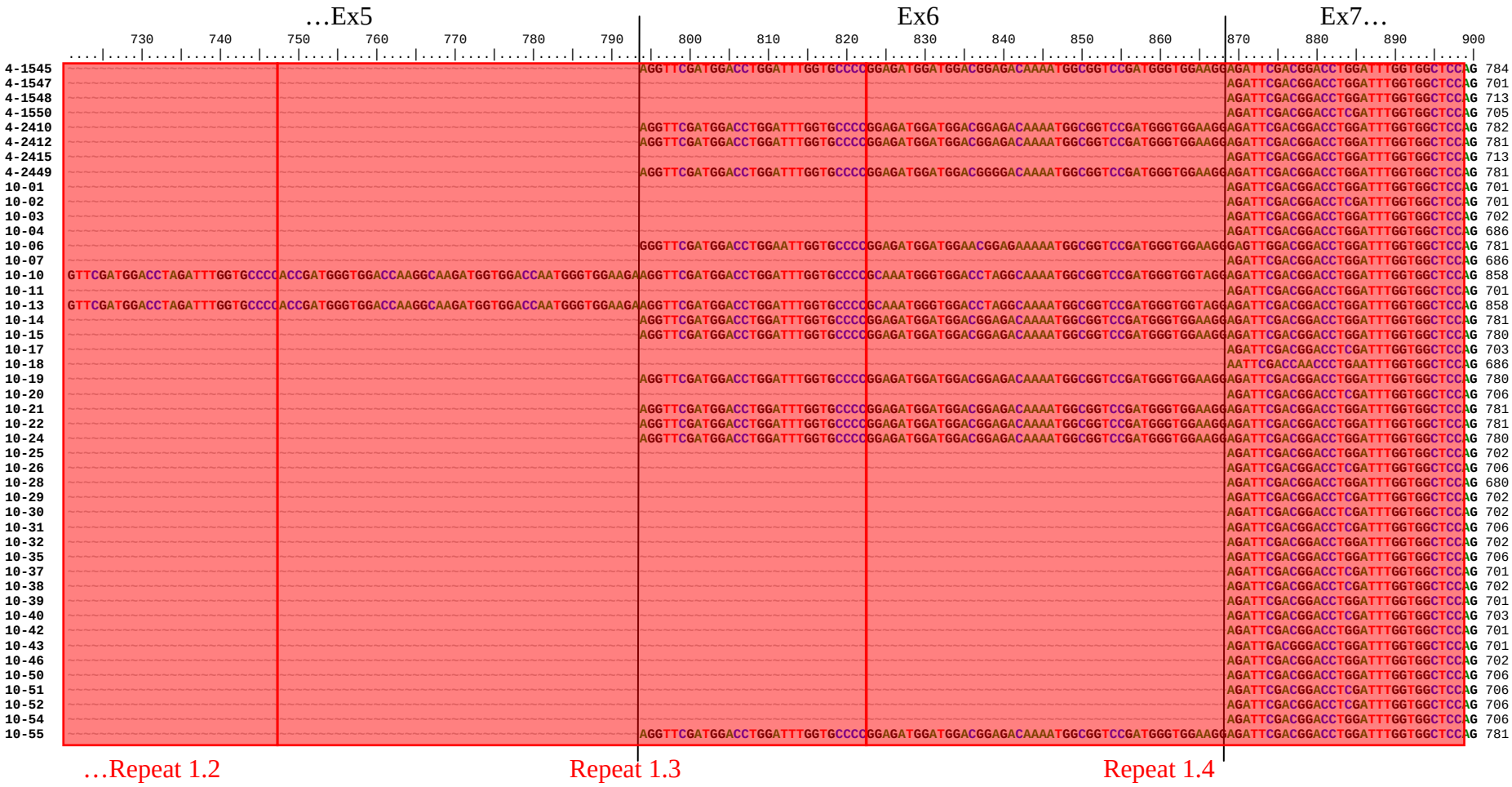
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Repeat 1.3
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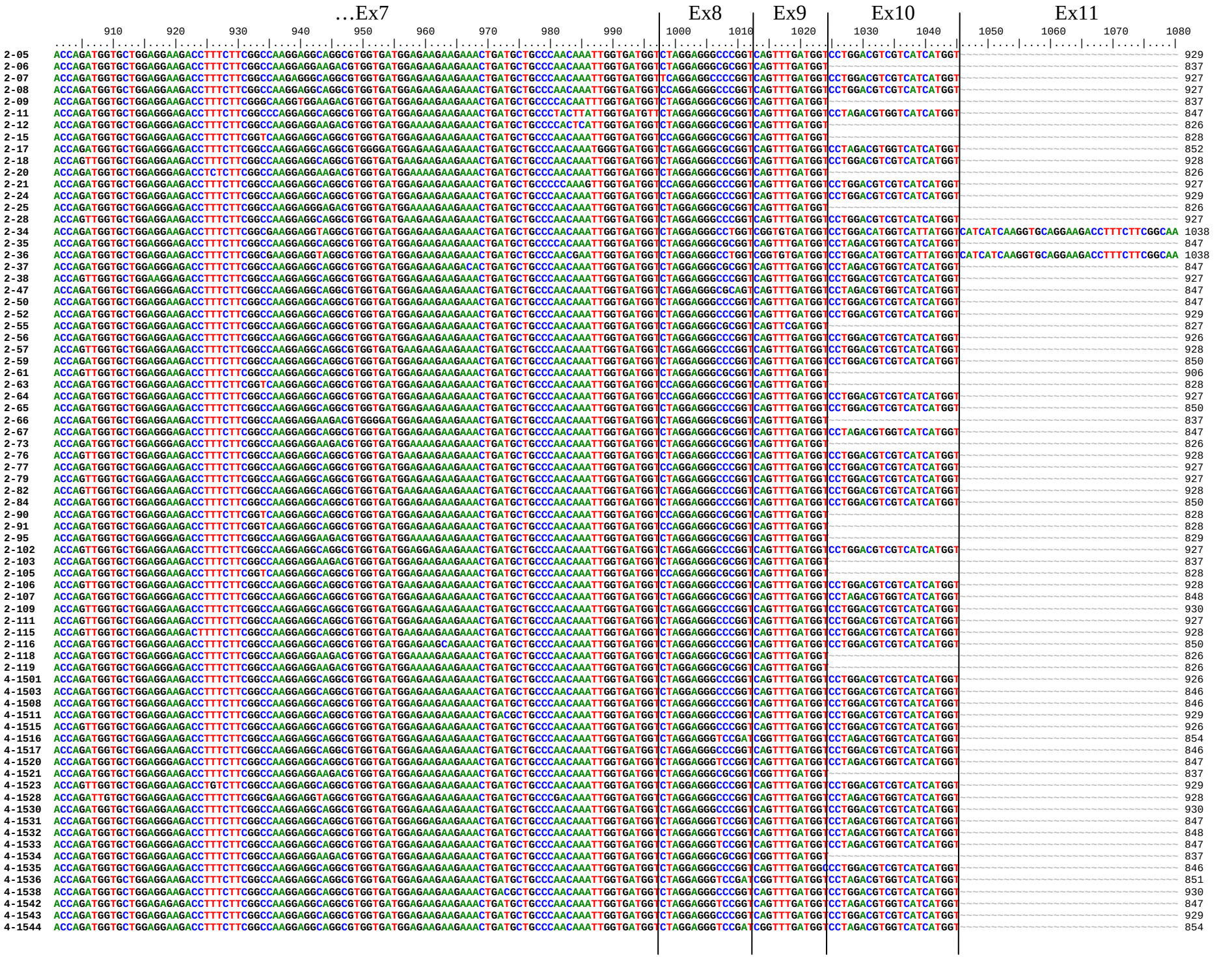
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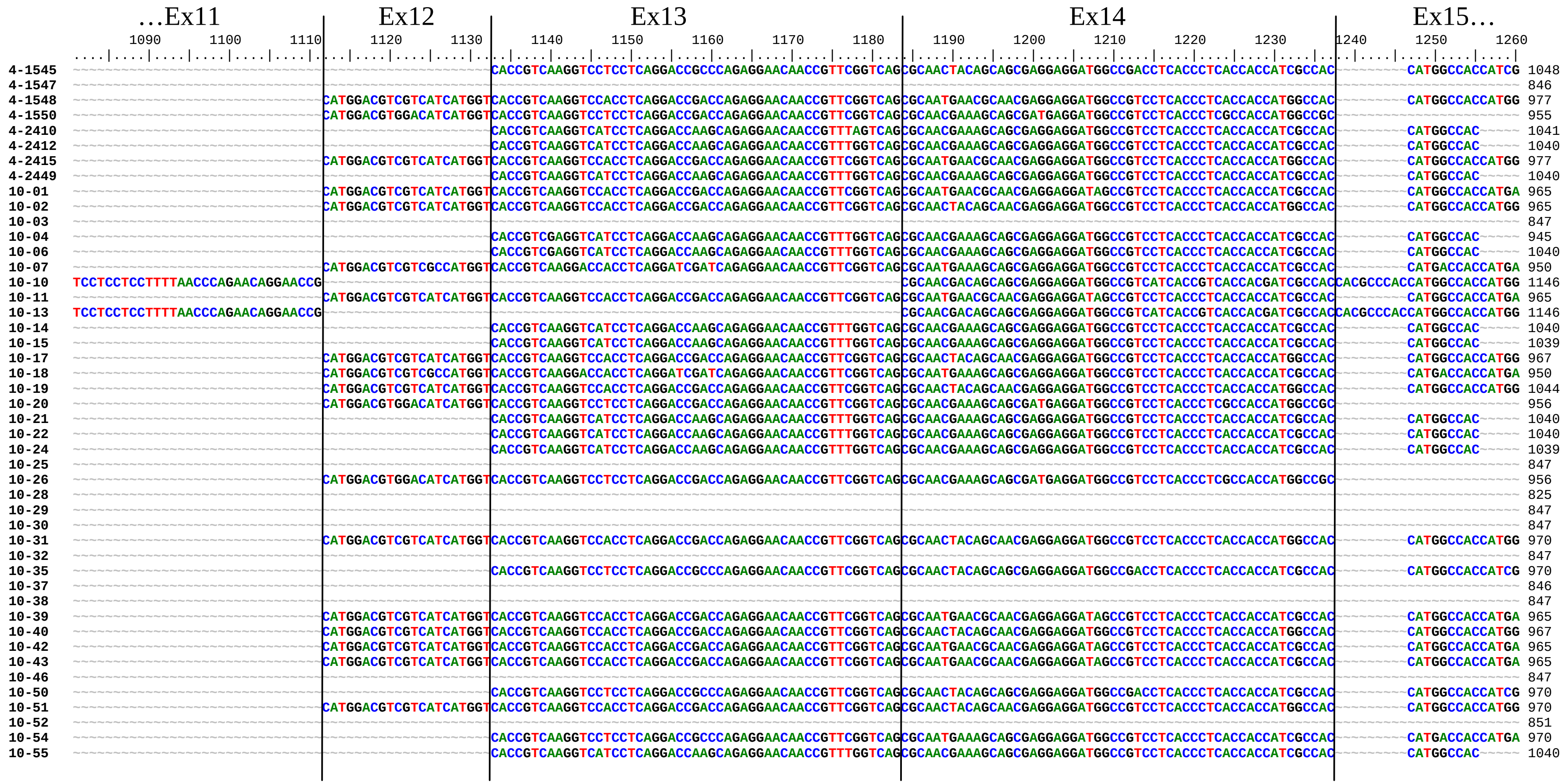
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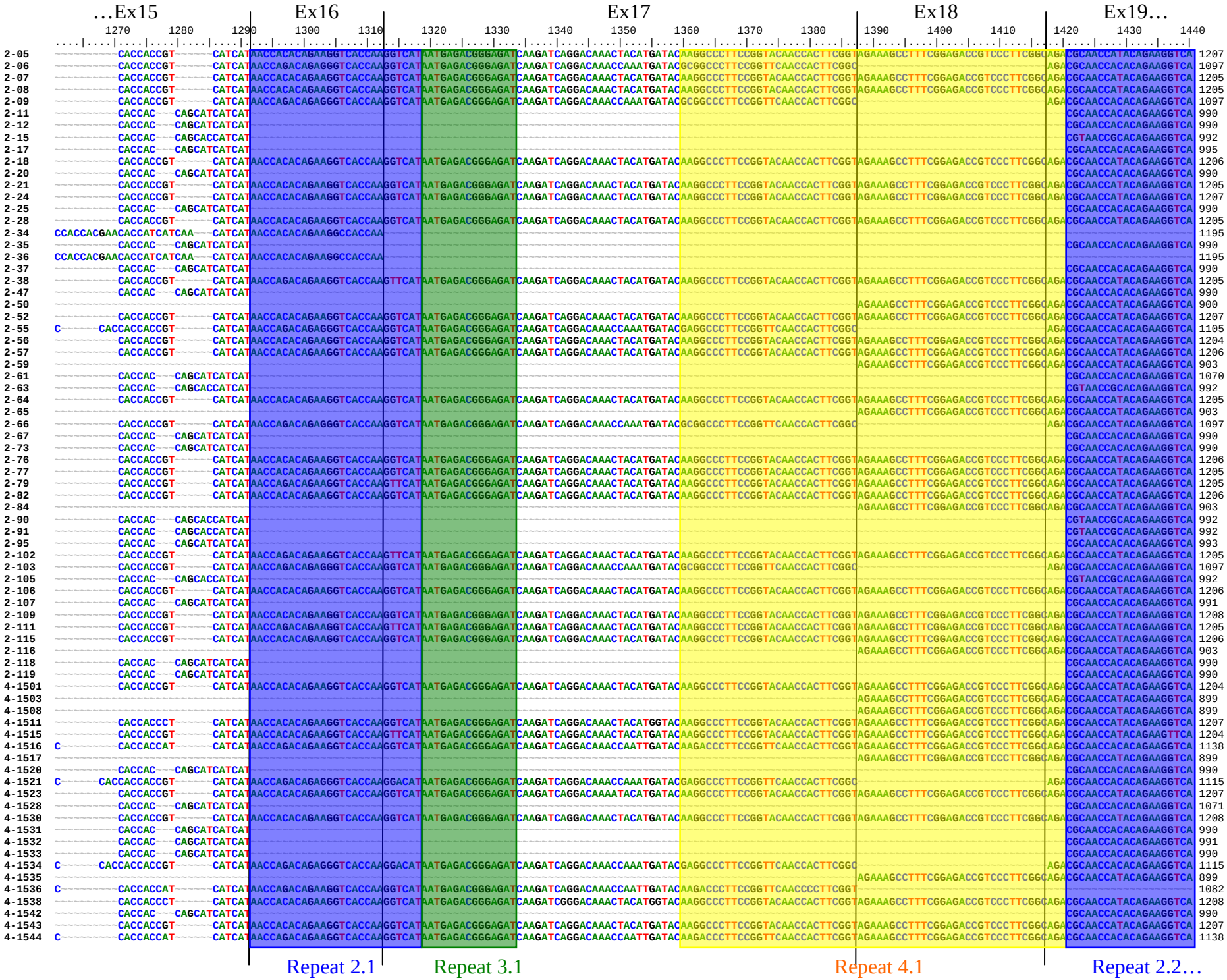
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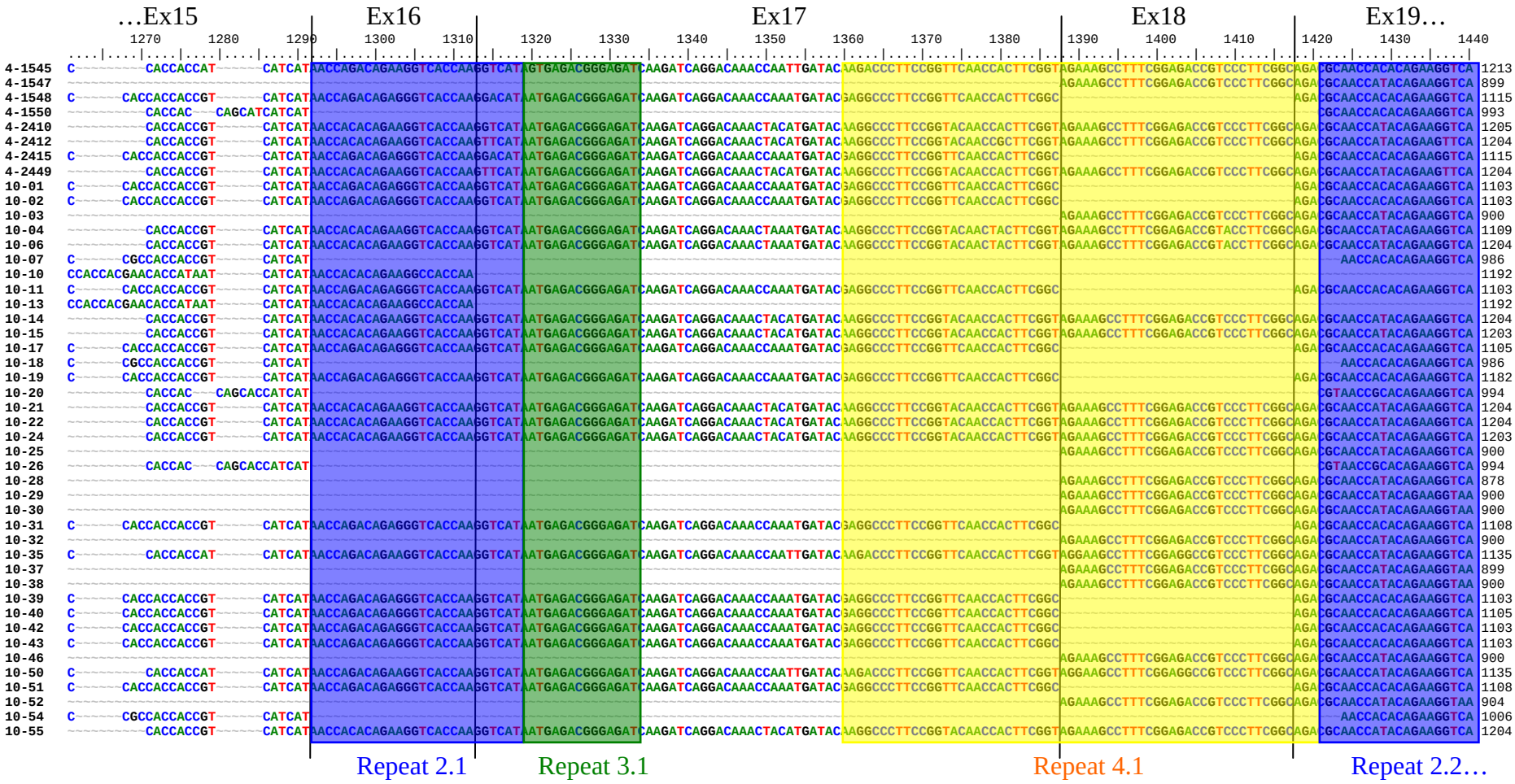
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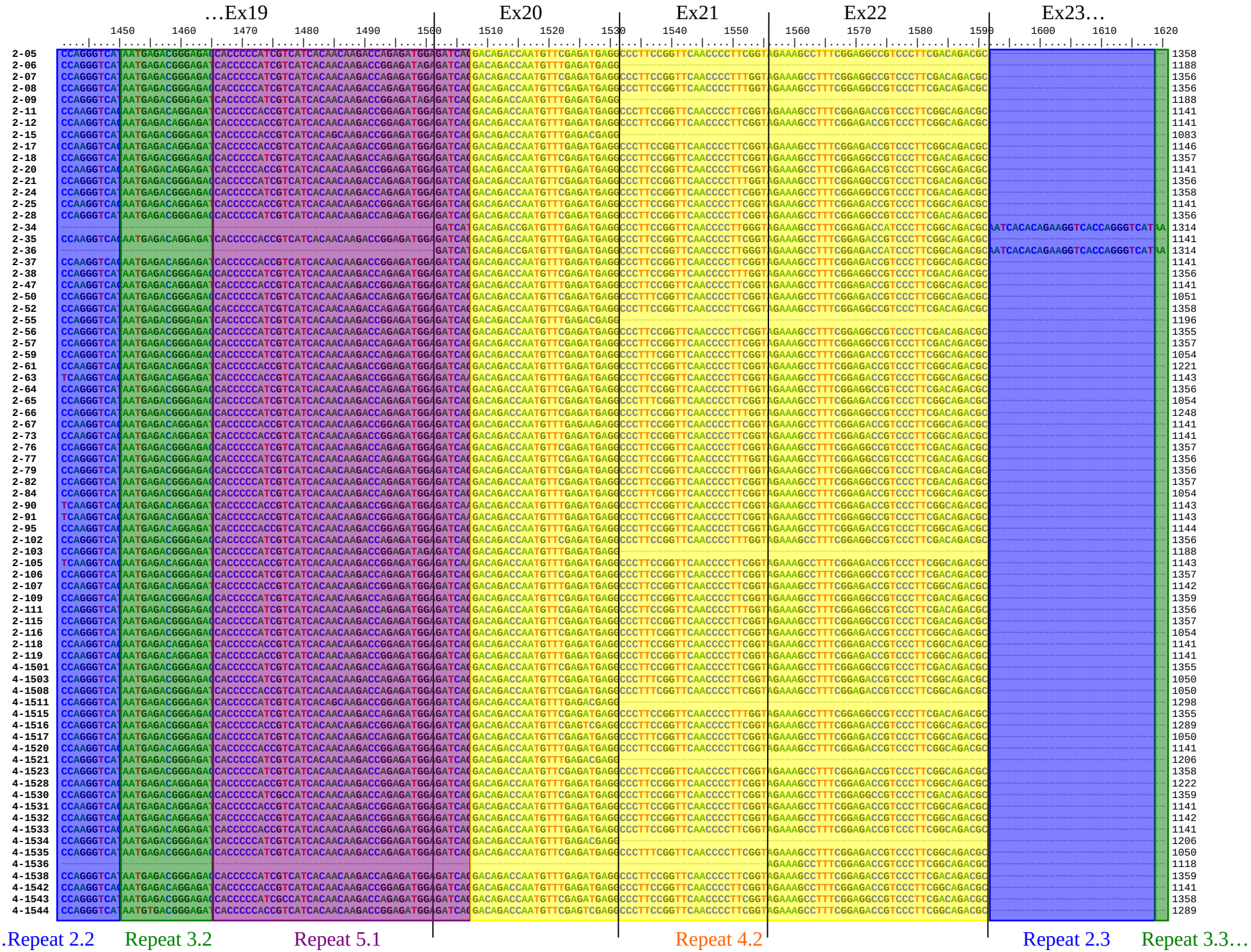
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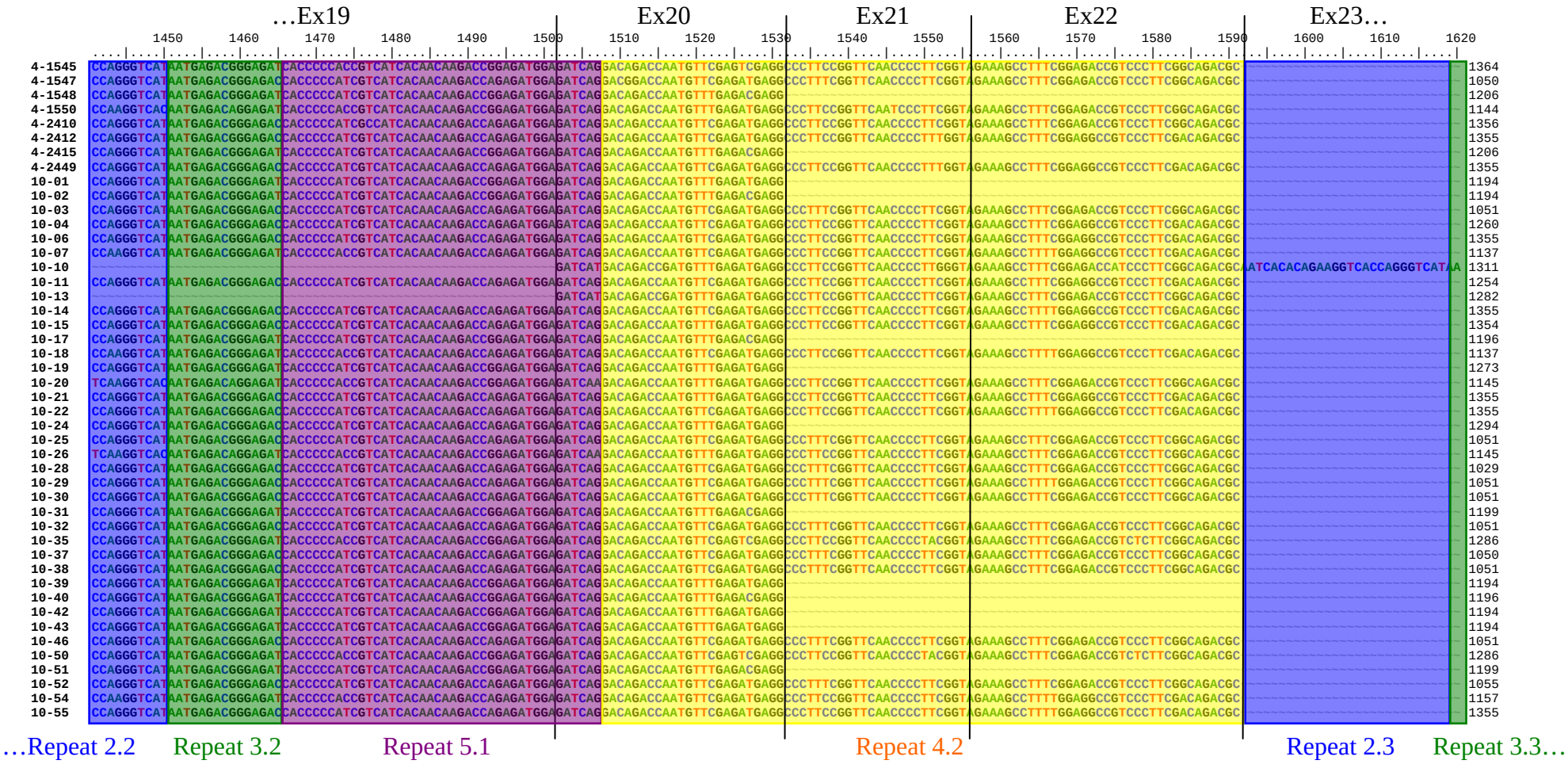
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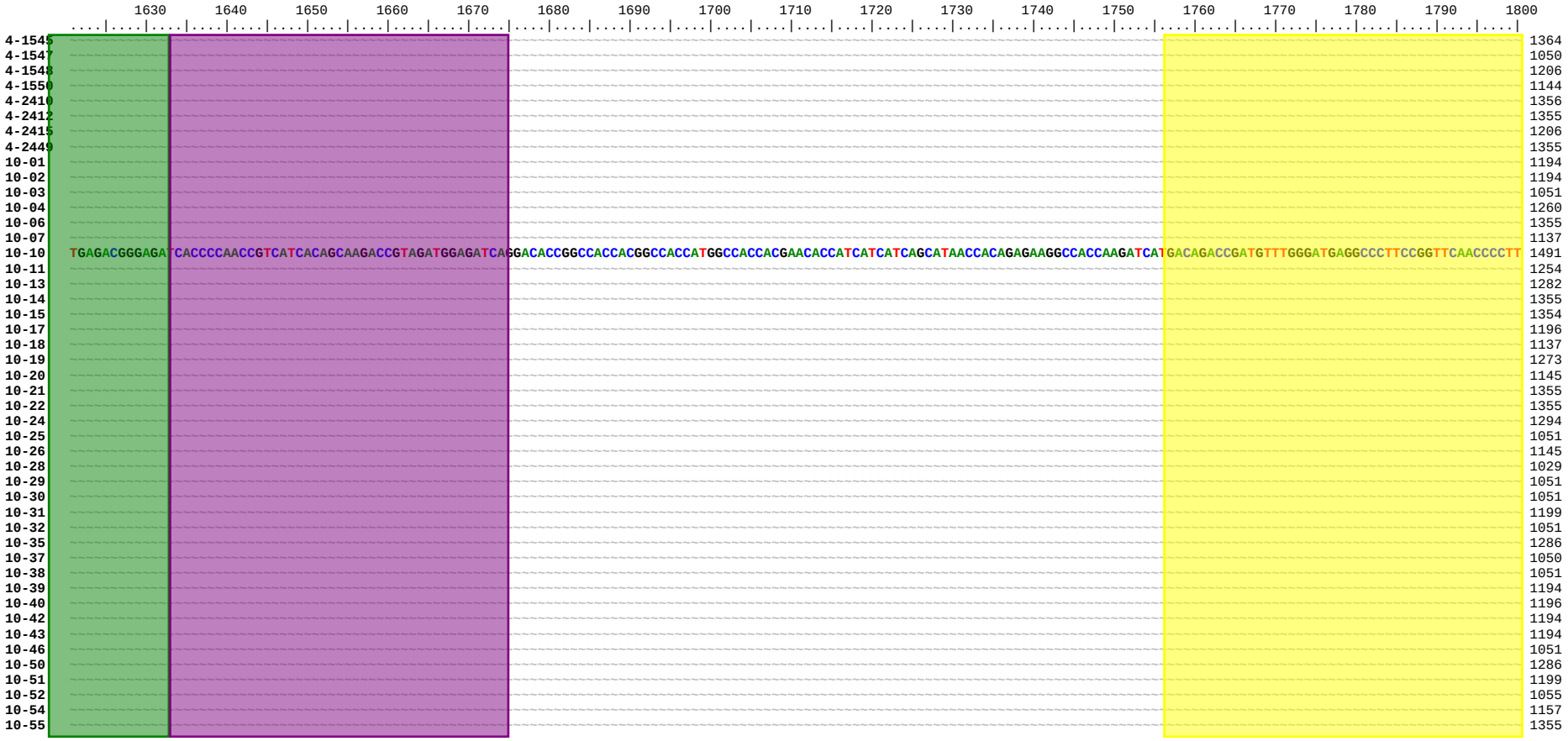
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4-1545 1364
4-1547 1050
4-1548 1206
4-1550 1144
4-2410 1356
4-2412 1355
4-2415 1206
4-2449 1355
10-01 1194
10-02 1194
10-03 1051
10-04 1260
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10-07 1137
10-10 TGAGACGGGAGATCACCCCAACCGTCATCACAGCAAGACCGTAGATGGAGATCAGGACACCGGCCACCACGGCCACCATGGCCACCACGAACACCATCATCATCAGCATAACCACAGAGAAGGCCACCAAGATCATGACAGACCGATGTTTGGGATGAGGCCCTTCCGGTTCAACCCCTT 1491
10-11 1254
10-13 1282
10-14 1355
10-15 1354
10-17 1196
10-18 1137
10-19 1273
10-20 1145
10-21 1355
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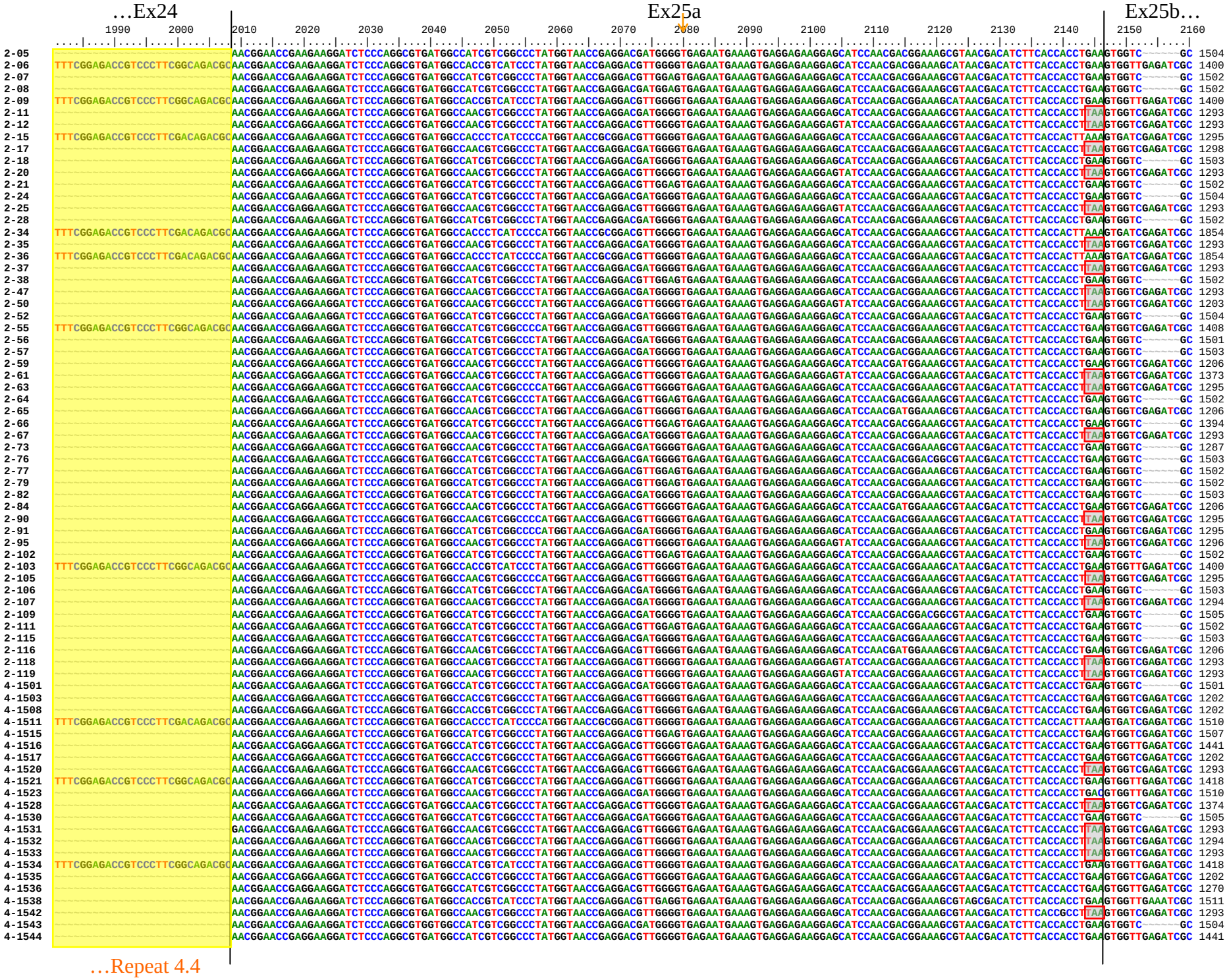
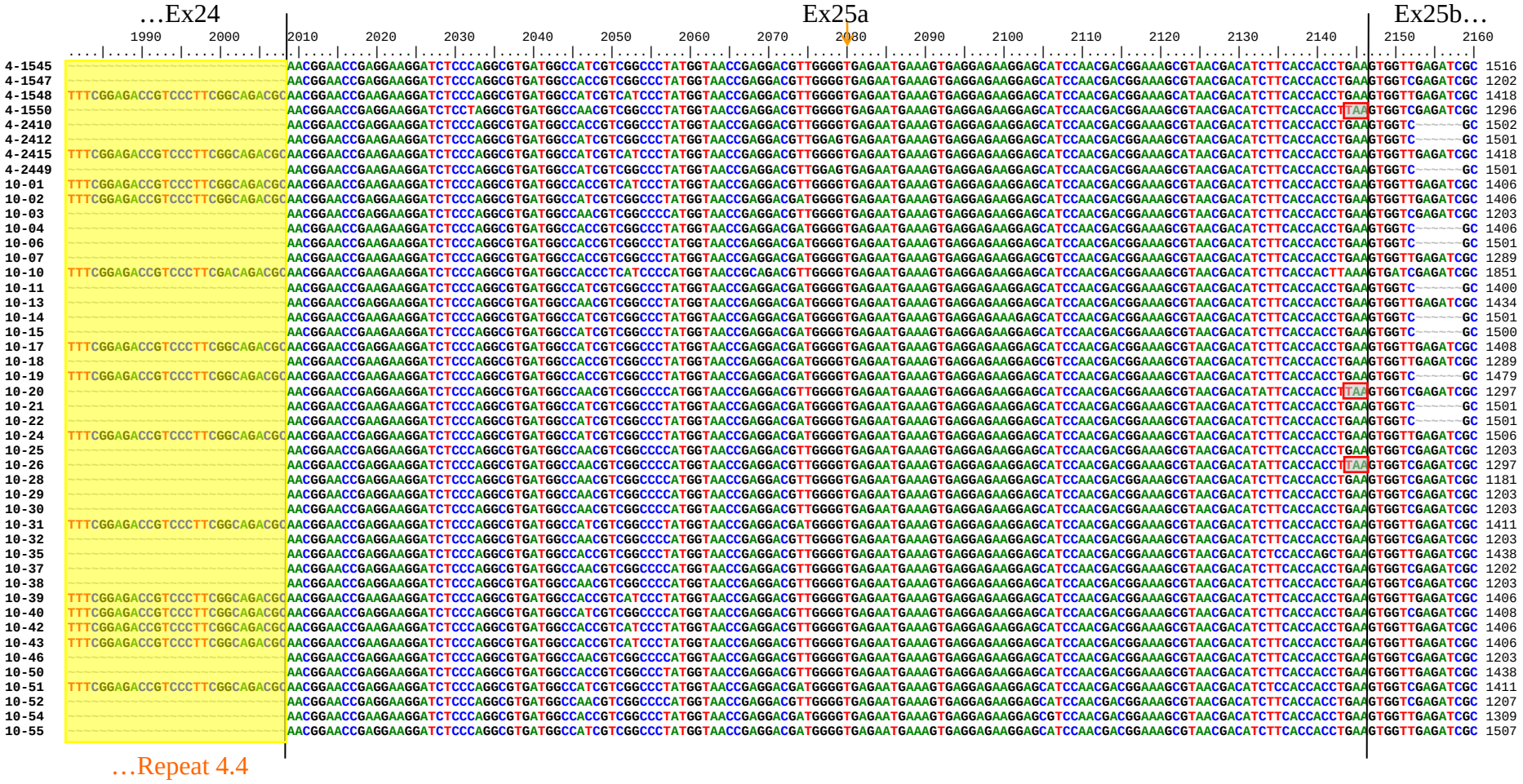
10-25 1051
10-26 1145
10-28 1029
10-29 1051
10-30 1051
10-31 1199
10-32 1051
10-35 1286
10-37 1050
10-38 1051
10-39 1194
10-40 1196
10-42 1194
10-43 1194
10-46 1051
10-50 1286
10-51 1199
10-52 1055
10-54 1157
10-55 1355
…Repeat 3.3
Repeat 5.2
Repeat 4.3…

…Ex23
Ex24…
1810 1820 1830 1840 1850 1860 1870 1880 1890 1900 1910 1920 1930 1940 1950 1960 1970 1980
2-05 1358
2-06 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1220
2-07 1356
2-08 1356
2-09 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1220
2-11 1141
2-12 1141
2-15 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1115
2-17 1146
2-18 1357
2-20 1141
2-21 1356
2-24 1358
2-25 1141
2-28 1356
2-34 CGGTAGAAAGCCTTTCGGAGACCATCCCTTCGGCAGACGCAACCACACAGAAGGTCACCAGGGTCATAATGAGACGGGAGATCACCCCCACCGTCATCACAGCAAGACCGGAGATGGAGATCAGGACAGACCAATGTTTGAGACGAGGCCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1674
2-35 1141
2-36 CGGTAGAAAGCCTTTCGGAGACCATCCCTTCGGCAGACGCAACCACACAGAAGGTCACCAGGGTCATAATGAGACGGGAGATCACCCCCACCGTCATCACAGCAAGACCGGAGATGGAGATCAGGACAGACCAATGTTTGAGACGAGGCCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1674
2-37 1141
2-38 1356
2-47 1141
2-50 1051
2-52 1358
2-55 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1228
2-56 1355
2-57 1357
2-59 1054
2-61 1221
2-63 1143
2-64 1356
2-65 1054
2-66 1248
2-67 1141
2-73 1141
2-76 1357
2-77 1356
2-79 1356
2-82 1357
2-84 1054
2-90 1143
2-91 1143
2-95 1144
2-102 1356
2-103 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1220
2-105 1143
2-106 1357
2-107 1142
2-109 1359
2-111 1356
2-115 1357
2-116 1054
2-118 1141
2-119 1141
4-1501 1355
4-1503 1050
4-1508 1050
4-1511 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1330
4-1515 1355
4-1516 1289
4-1517 1050
4-1520 1141
4-1521 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1238
4-1523 1358
4-1528 1222
4-1530 1359
4-1531 1141
4-1532 1142
4-1533 1141
4-1534 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1238
4-1535 1050
4-1536 1118
4-1538 1359
4-1542 1141
4-1543 1358
4-1544 1289
…Repeat 4.3
Repeat 2.4
Repeat 3.4
Repeat 5.3…
Repeat 4.4…

…Ex23
Ex24…
1810 1820 1830 1840 1850 1860 1870 1880 1890 1900 1910 1920 1930 1940 1950 1960 1970 1980
4-1545 1364
4-1547 1050
4-1548 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1238
4-1550 1144
4-2410 1356
4-2412 1355
4-2415 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1238
4-2449 1355
10-01 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1226
10-02 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1226
10-03 1051
10-04 1260
10-06 1355
10-07 1137
10-10 CGGTAGAAAGCCTTTCGGAGACCATCCCTTCGGCAGACGCAACCACACAGAAGGTCACCAGGGTCATAATGAGACGGGAGATCACCCCCACCGTCATCACAGCAAGACCGGAGATGGAGATCAGGACAGACCAATGTTTGAGACGAGGCCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1671
10-11 1254
10-13 1282
10-14 1355
10-15 1354
10-17 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1228
10-18 1137
10-19 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1305
10-20 1145
10-21 1355
10-22 1355
10-24 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1326
10-25 1051
10-26 1145
10-28 1029
10-29 1051
10-30 1051
10-31 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1231
10-32 1051
10-35 1286
10-37 1050
10-38 1051
10-39 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1226
10-40 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1228
10-42 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1226
10-43 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1226
10-46 1051
10-50 1286
10-51 CCCTTCTGGGTCAACCCCTTCGGTAGAAAGCC 1231
10-52 1055
10-54 1157
10-55 1355
…Repeat 4.3
Repeat 2.4
Repeat 3.4
Repeat 5.3…
Repeat 4.4…


…Ex24
Ex25a
Ex25b…
…Repeat 4.4


…Ex24
Ex25a
Ex25b…
…Repeat 4.4

…Ex25b

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                2170      2180      2190      2200
          ....|....|....|....|....|....|....|....|
2-05      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGAAG 1544
2-06      AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAA 1440
2-07      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1542
2-08      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1542
2-09      AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1440
2-11      AGTCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1333
2-12      GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1318
2-15      AATCAATGAAGTAGACACCAATGTGGTCGCCGAGGTGTAG 1335
2-17      AGTCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1338
2-18      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAA 1543
2-20      GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1318
2-21      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1542
2-24      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAA 1544
2-25      GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1318
2-28      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1542
2-34      AATCAATGAAGTAGACACCAATGTGGTCGCCGAGGTGTAG 1894
2-35      AGTCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1333
2-36      AATCAATGAAGTAGACACCAATGTGGTCGCCGAGGTGTAG 1894
2-37      AGTCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1333
2-38      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1542
2-47      AGTCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1333
2-50      GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1228
2-52      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1544
2-55      GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1433
2-56      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1541
2-57      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1543
2-59      GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1231
2-61      GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1398
2-63      AGTCAATGAAGAAGACATCAATGGGGTCGCCGAGGTGTAG 1335
2-64      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1542
2-65      GATCAATGAAGTAGACACCAATGGGGTCGCCGAGGTGTAG 1246
2-66      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1434
2-67      AGTCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1333
2-73      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1327
2-76      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1543
2-77      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1542
2-79      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1542
2-82      AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGAGTAG 1543
2-84      GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1231
2-90      AGTCAATGAAGAAGACATCAATGGGGTCGCCGAGGTGTAT 1335
2-91      TGACAAT~~~~~~GACTACGACGTGGTCGCCGAGTCGTAT 1329
2-95      GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1321
2-102     AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1542
2-103     AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1440
2-105     AGTCAATGAAGAAGACATCAATGGGGTCGCCGAGGTGTAG 1335
2-106     AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1543
2-107     AGTCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1334
2-109     AATCAATGAAGAACACATCAATGTGGTCGCCGAGGTGTAG 1545
2-111     AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGAGTAG 1542
2-115     AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1543
2-116     GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1231
2-118     GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1318
2-119     GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1318
4-1501    AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1541
4-1503    GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1227
4-1508    GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1227
4-1511    AATCAATGAAGTAGACACCAATGTGGTCGCCGAGGTGTAG 1550
4-1515    AGTCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1547
4-1516    ATTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1481
4-1517    GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1227
4-1520    AGTCAATGAAGAAGACATCAATGATGTCGCCGAGGTGTAG 1333
4-1521    AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1458
4-1523    AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1550
4-1528    AGTCAATGAAGAAGACATCAATGATGTCGCCGAGGTGTAG 1414
4-1530    AATCAATGAAGAAGACATCAATGTGGTCGCTGAGGTGTAG 1545
4-1531    AGTCAATGAAGAAGACATCAATGATGTCGCCGAGGTGTAG 1333
4-1532    AGTCAATGAAGAAGACATCAATGATGTCGCCGAGGTGTAG 1334
4-1533    AGTCAATGAAGAAGACATCAATGATGTCGCTGAGGTGTAG 1333
4-1534    AGTCAATGAAGAAGACGTCAATATGGTCGCCGAGGTGTAG 1458
4-1535    GATC~~~~~~~~~~~~~~AATGAGGTCGCCGAGGTGTAG 1227
4-1536    AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1310
4-1538    AGTCAATGAAGAAGACGTCAATGTGGTCGCTGAGGTGTAG 1551
4-1542    AGTCAATGAAGAAGACATCAATGATGTCGCTGAGGTGTAG 1333
4-1543    AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1544
4-1544    AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1481
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…Ex25b

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                 2170      2180      2190      2200
          ....|....|....|....|....|....|....|....|....|
4-1545    AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1556
4-1547    GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1227
4-1548    AGTCAATGAAGAAGACGTCAATATGGTCGCCGAGGTGTAG 1458
4-1550    AGTCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1336
4-2410    AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1542
4-2412    AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1541
4-2415    AGTCAATGAAGAAGACGTCAATATGGTCGCCGAGGTGTAA 1458
4-2449    AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1541
10-01     AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1446
10-02     AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1446
10-03     GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1228
10-04     AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1446
10-06     AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1541
10-07     ATTCAATGAAGAAGACGTCCATGTGGTCGCCGAGGTGTAG 1329
10-10     AATCAATGAAGTAGACACCAATGTGGTCGCCGAGGTGTAG 1891
10-11     AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1440
10-13     AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1474
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10-18     ATTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1329
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10-20     AGTCAATGAAGAAGACATCAATGGGGTCGCCGAGGTGTAG 1337
10-21     AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1541
10-22     AATCAATGAAGAAGACATCAATGTGGTCGCCGAGGTGTAG 1541
10-24     AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1546
10-25     GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1228
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10-28     GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1206
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10-31     AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1451
10-32     GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1228
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10-42     AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTTA 1446
10-43     AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTTA 1446
10-46     GATC~~~~~~~~~~~~~~AATGATGTGGCCGAGGTGTAG 1228
10-50     ATTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1478
10-51     AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1451
10-52     GATC~~~~~~~~~~~~~~AATGATGTCGCCGAGGTGTAG 1232
10-54     ATTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1349
10-55     AGTCAATGAAGAAGACGTCAATGTGGTCGCCGAGGTGTAG 1547
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