

1           Supplementary data for the manuscript:  
2           Trans-species Polymorphism at Antimicrobial  
3           Innate Immunity Cathelicidin Genes of Atlantic  
4           cod and Related Species

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Exon 1

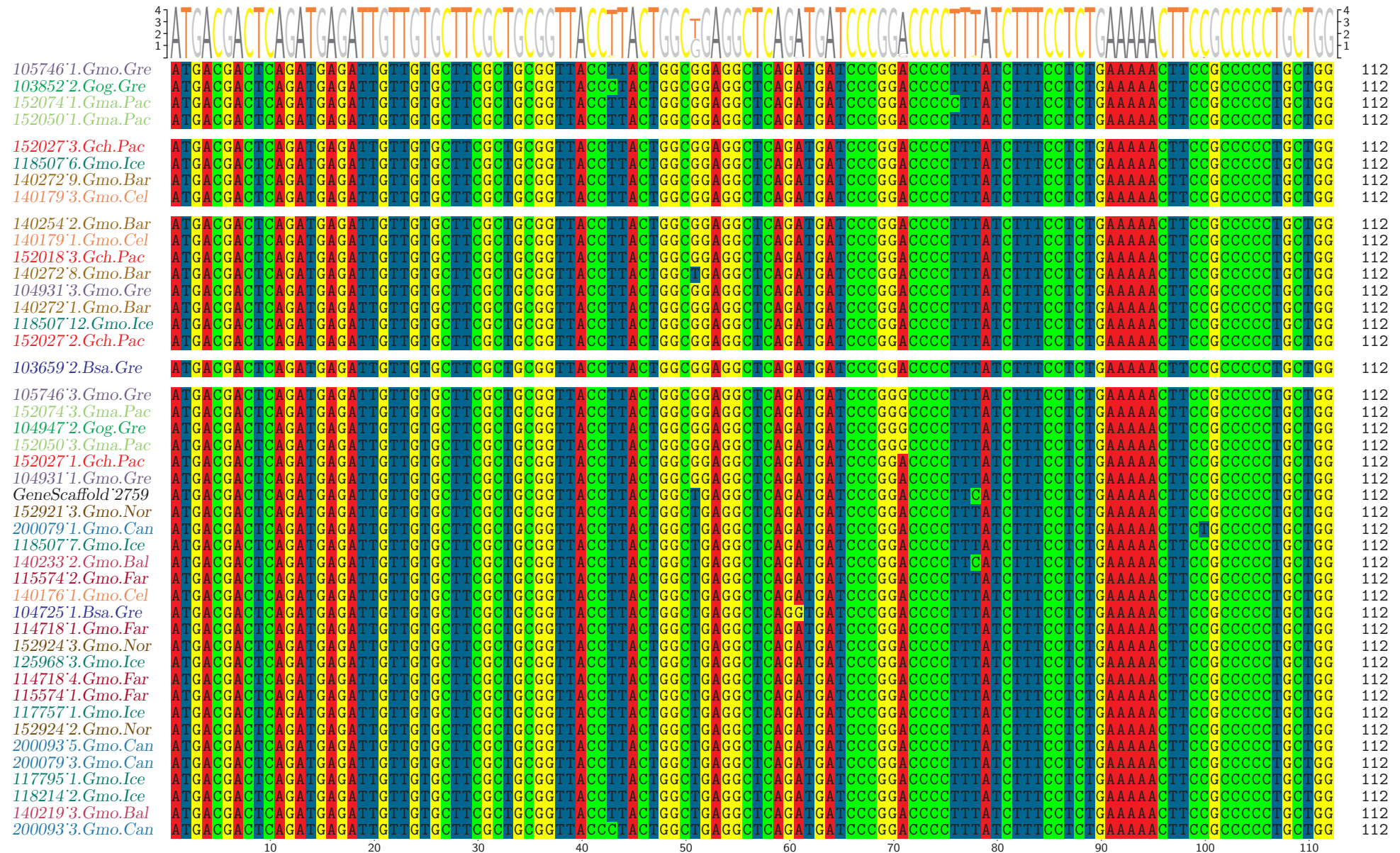
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Exon 1



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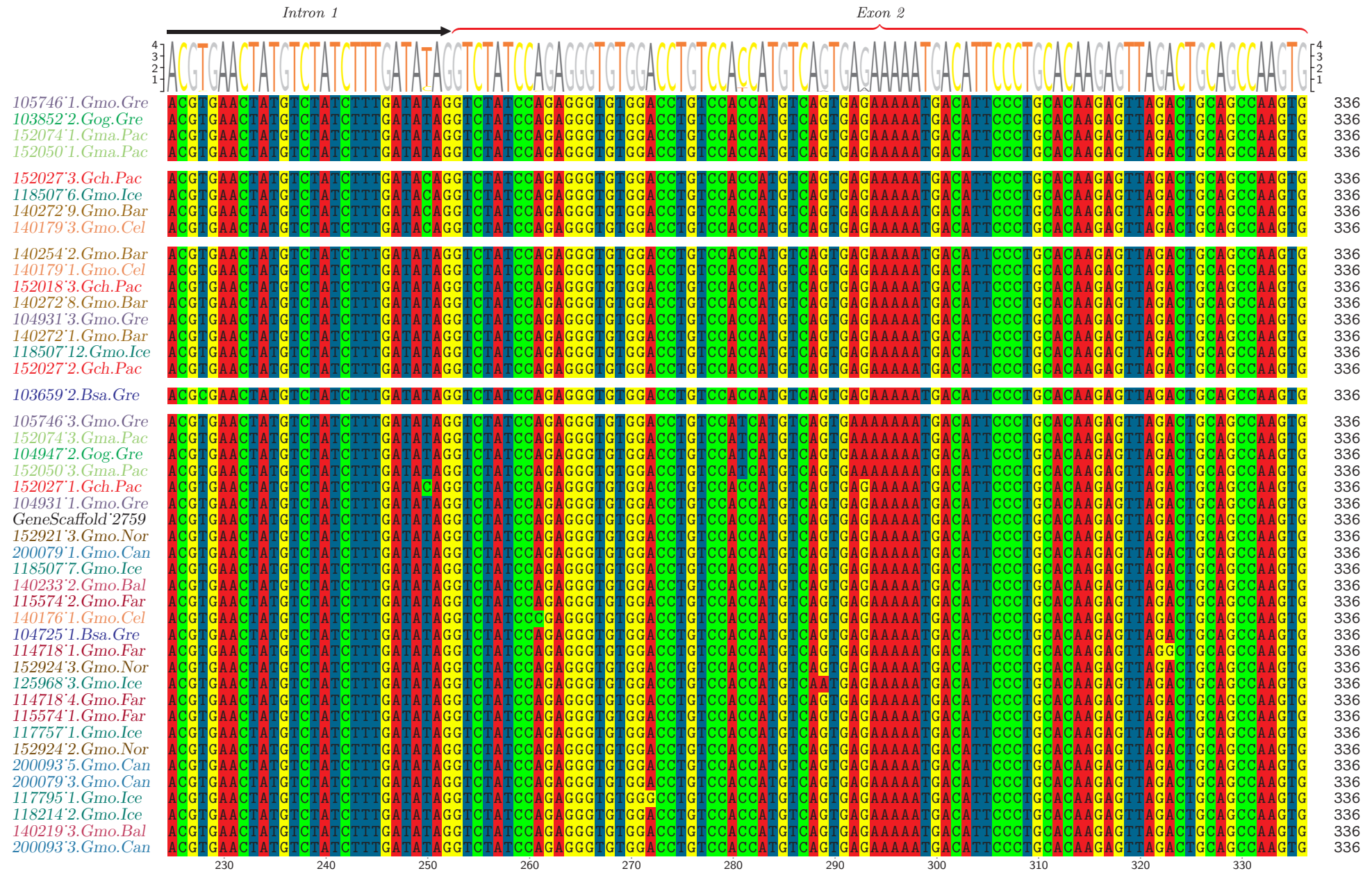
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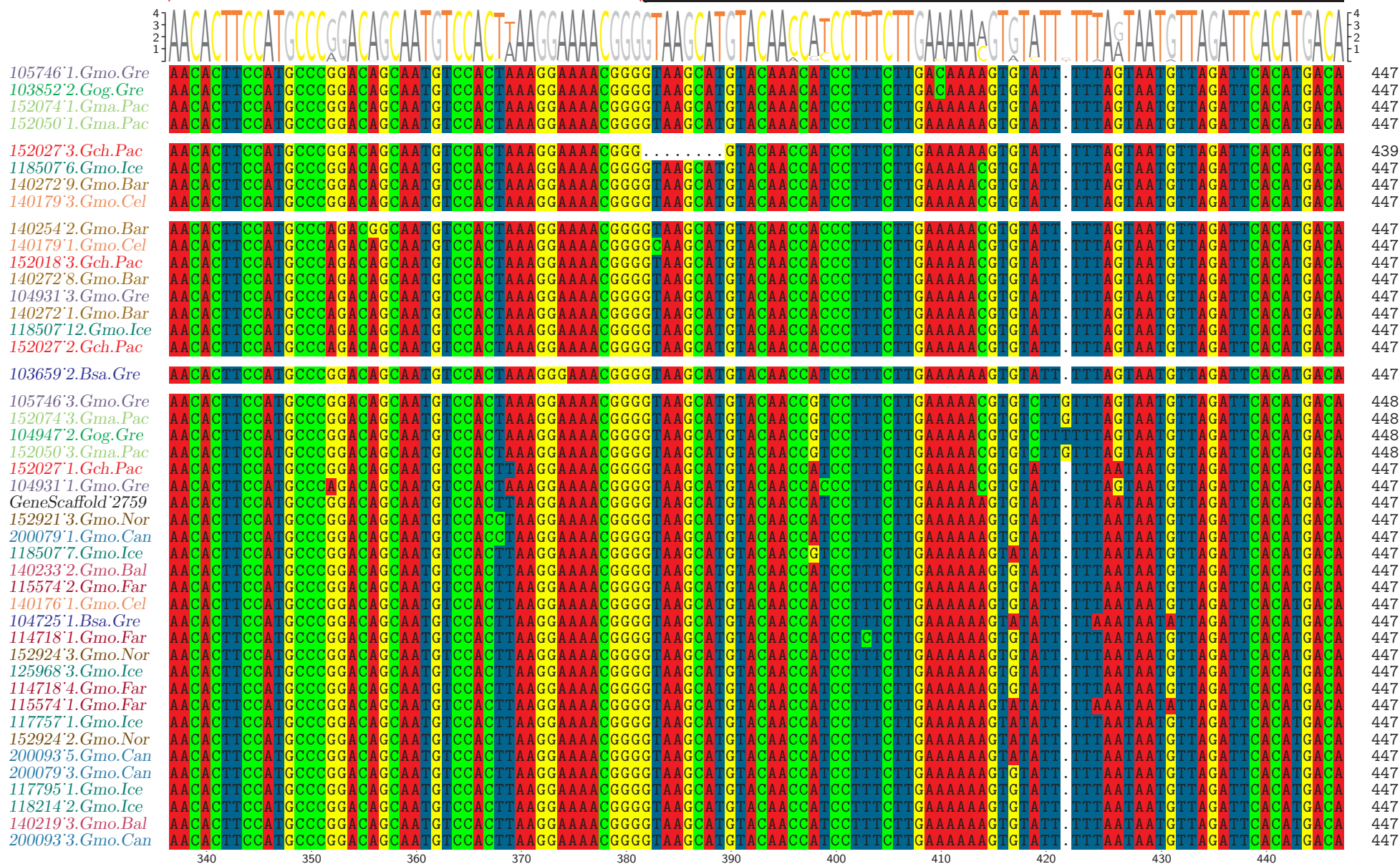
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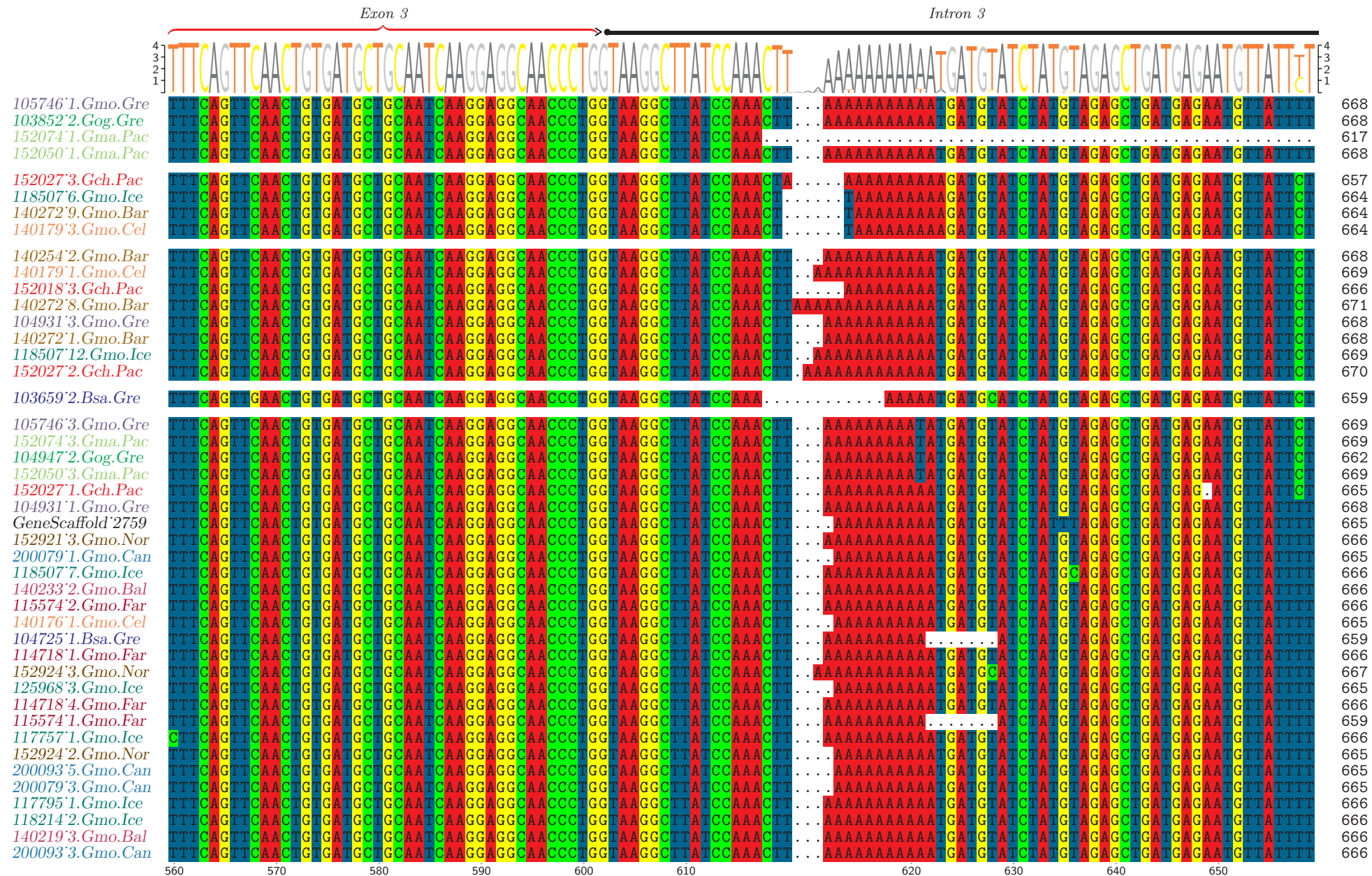
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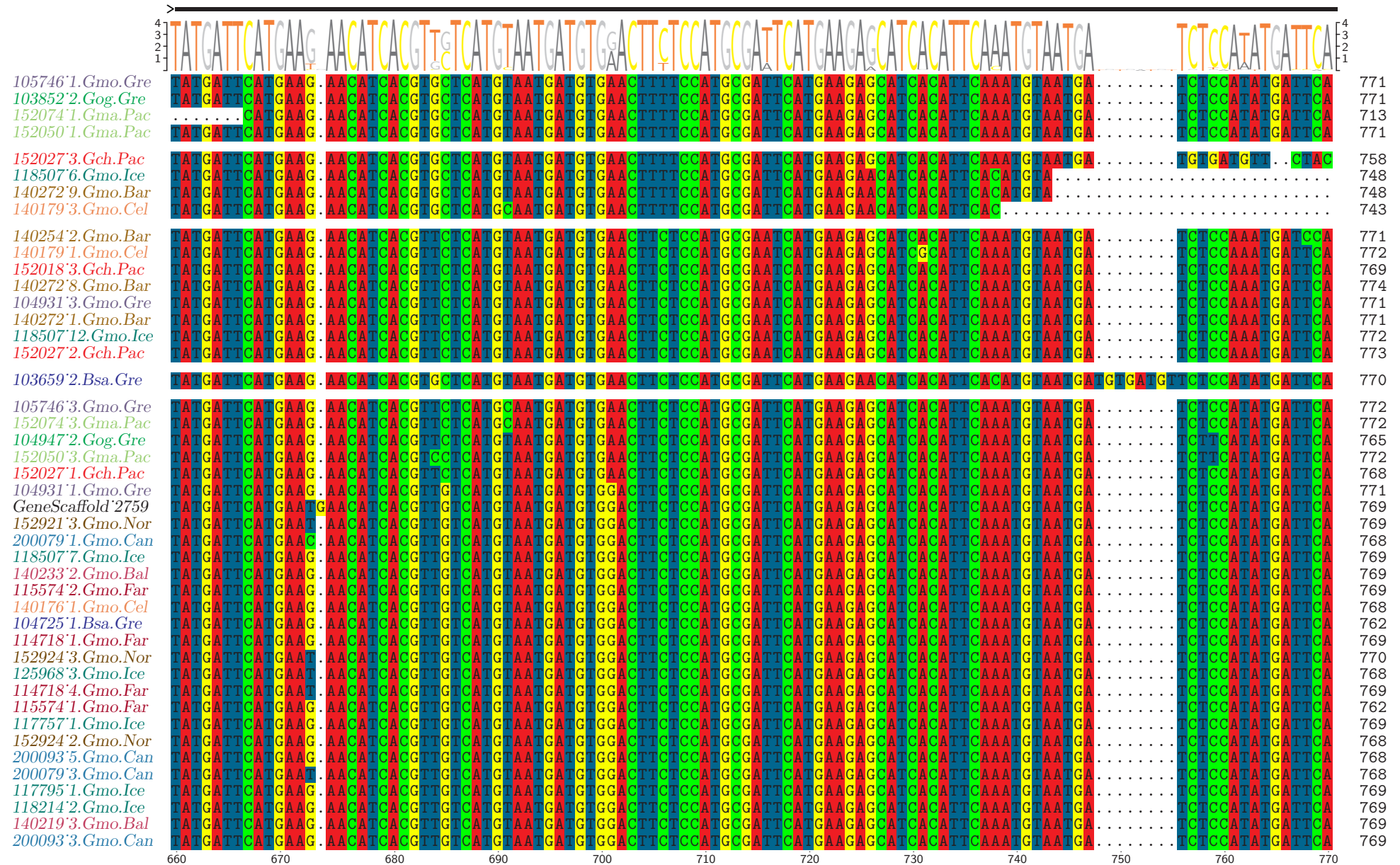




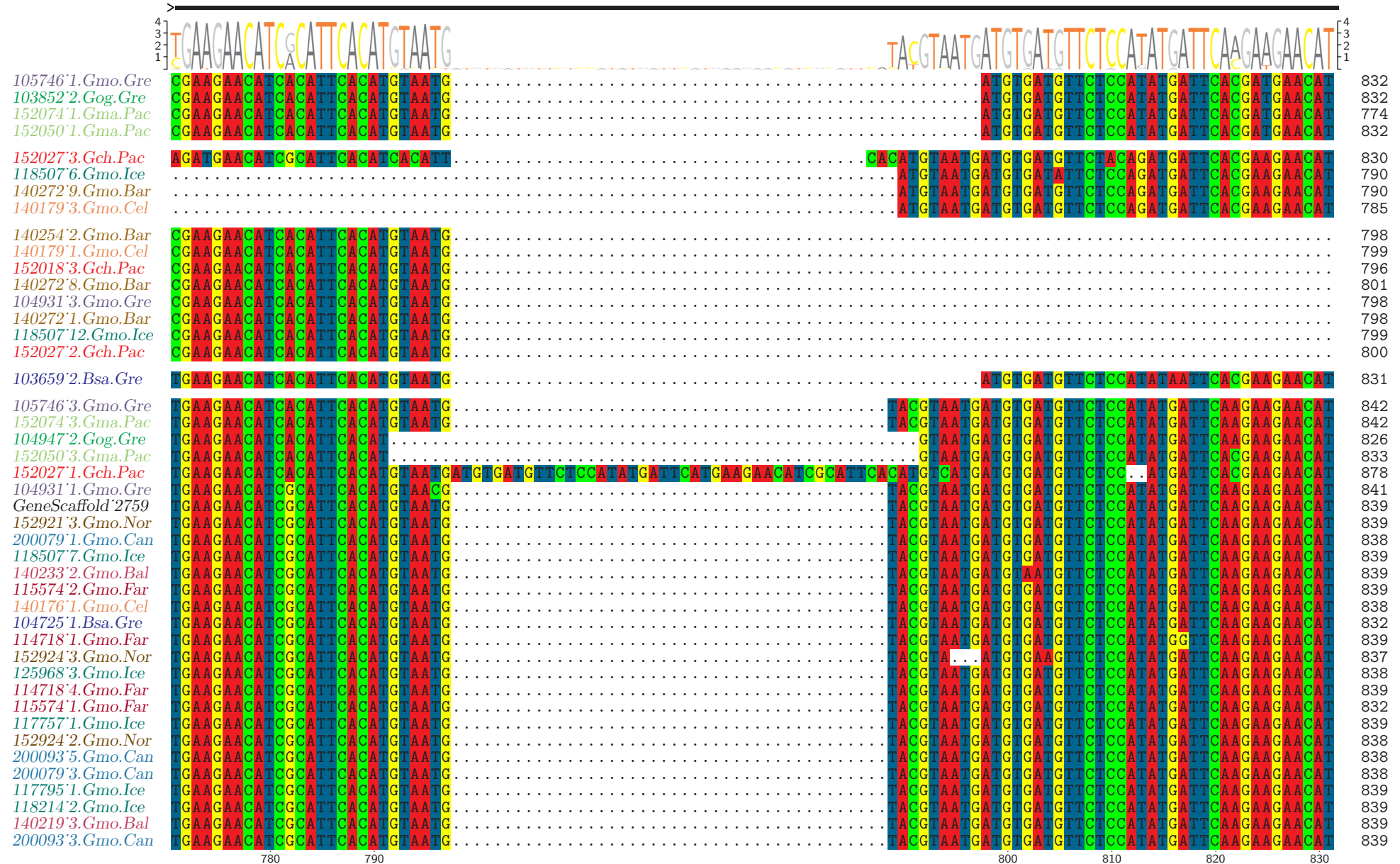




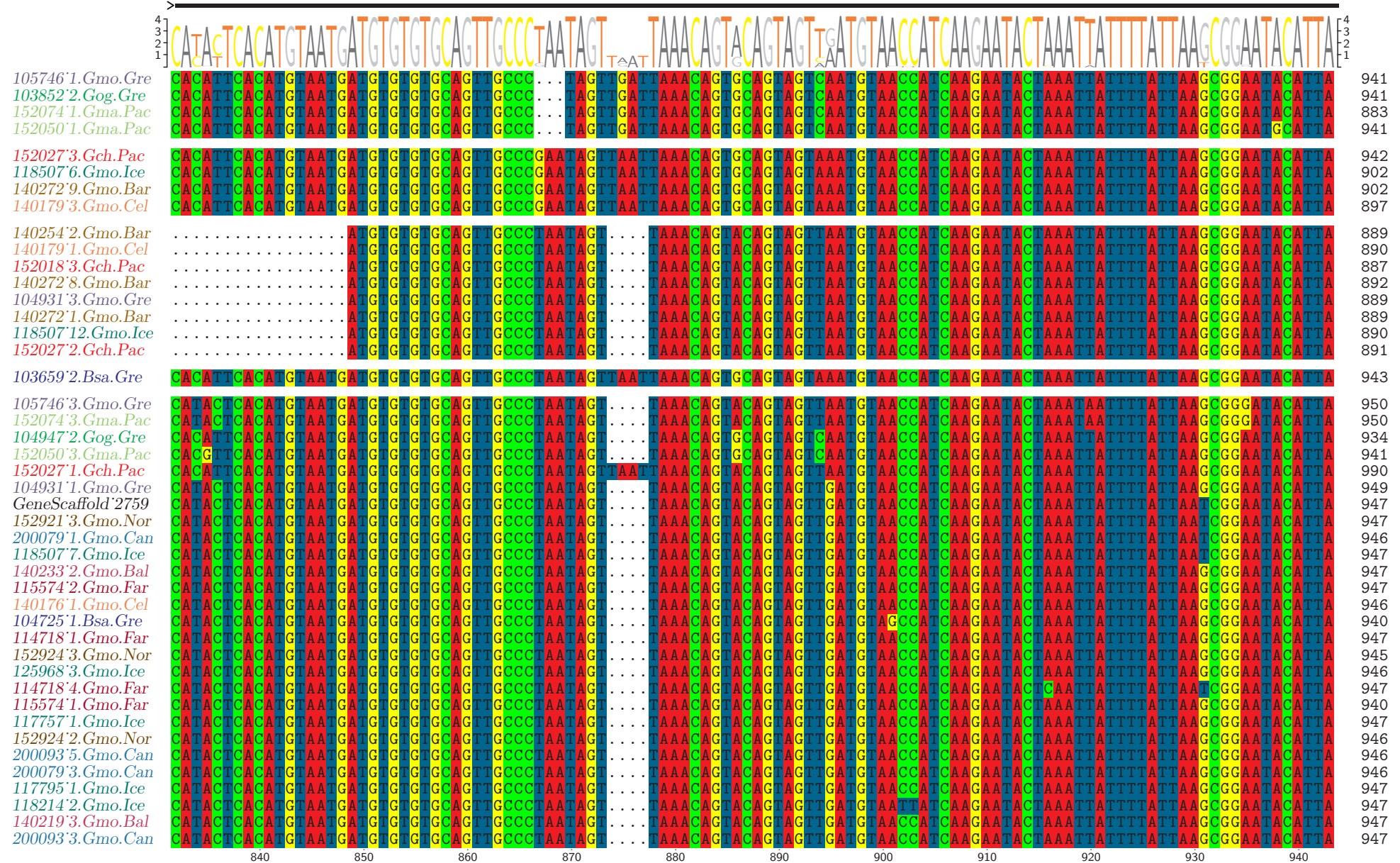
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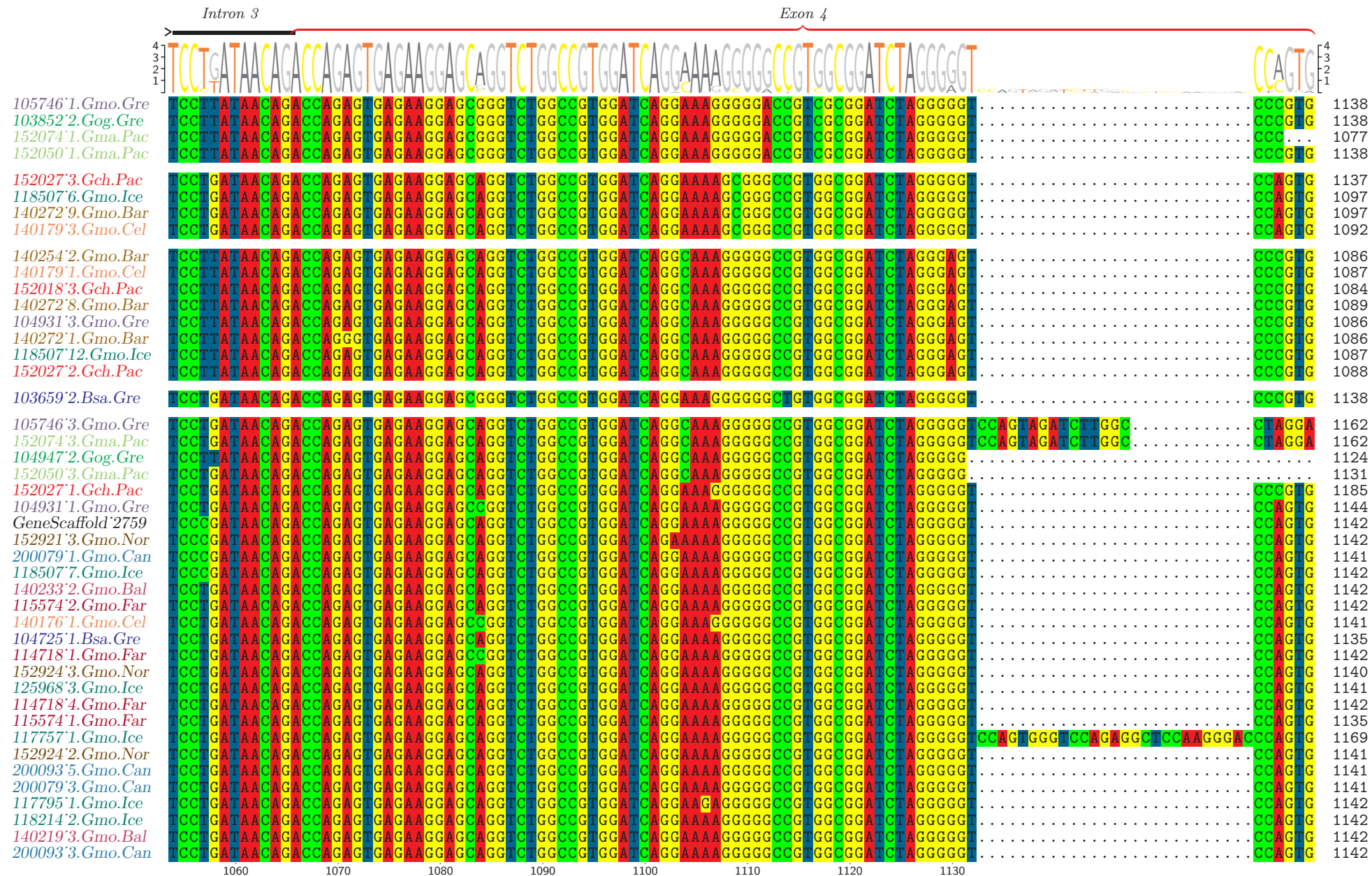
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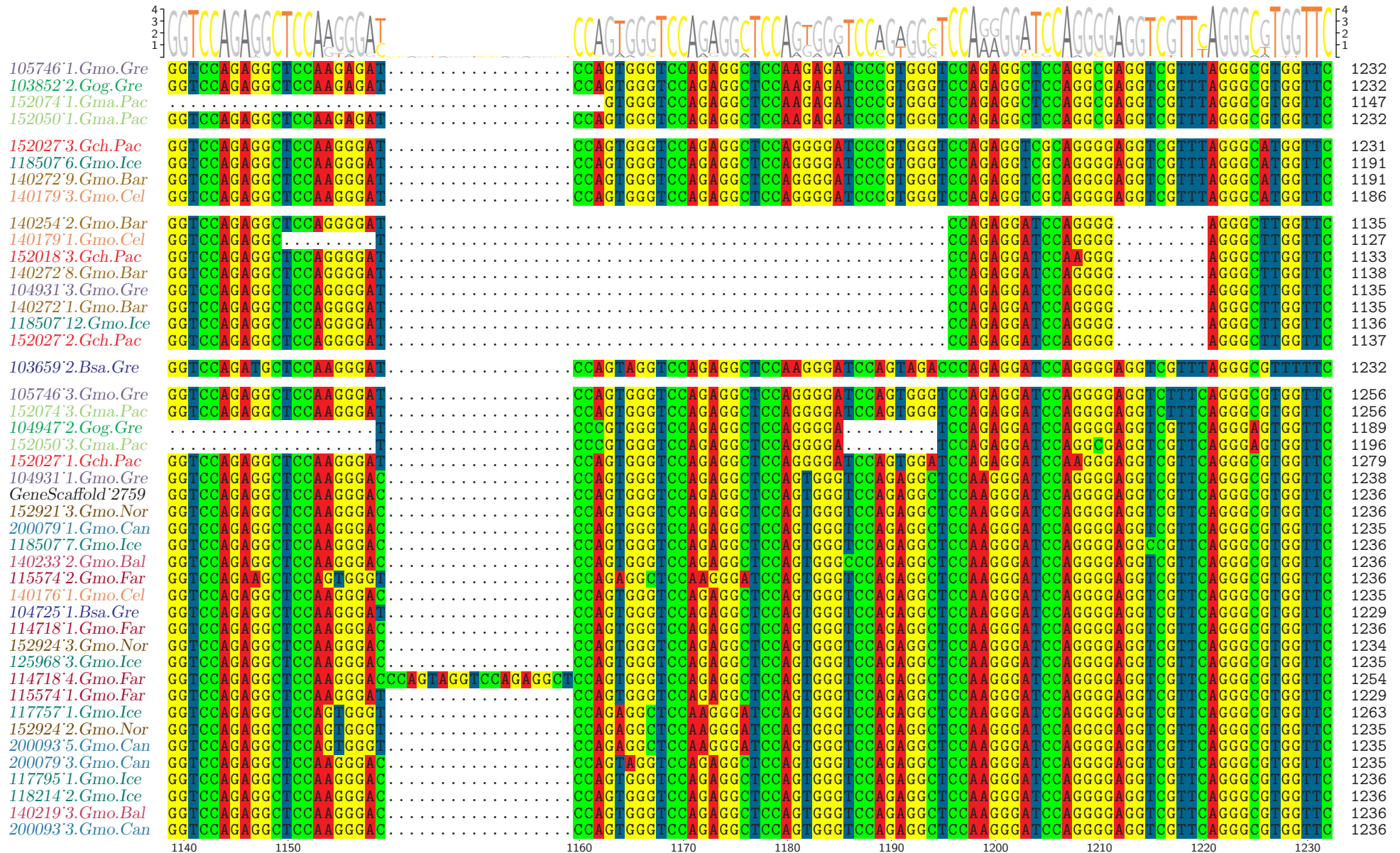
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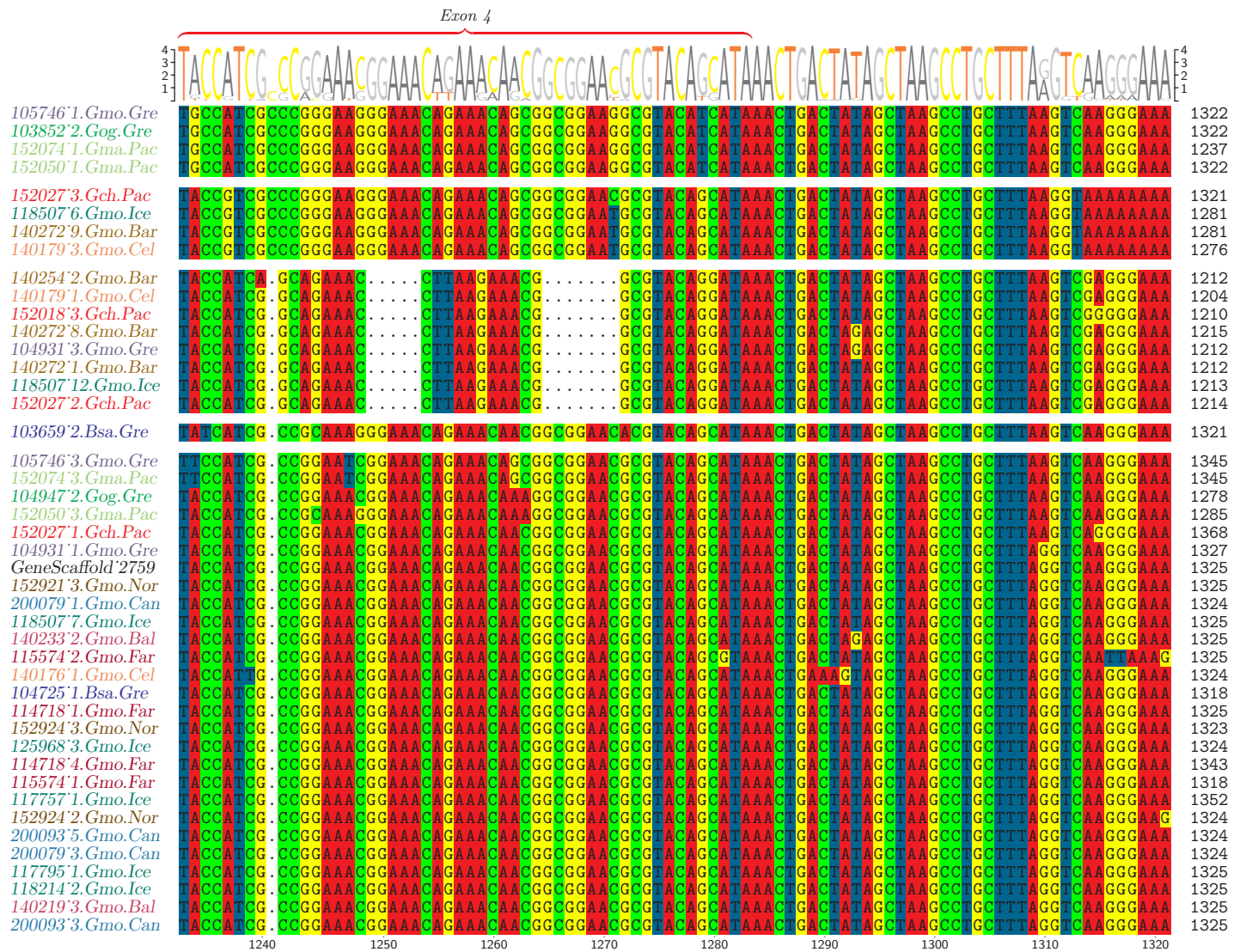




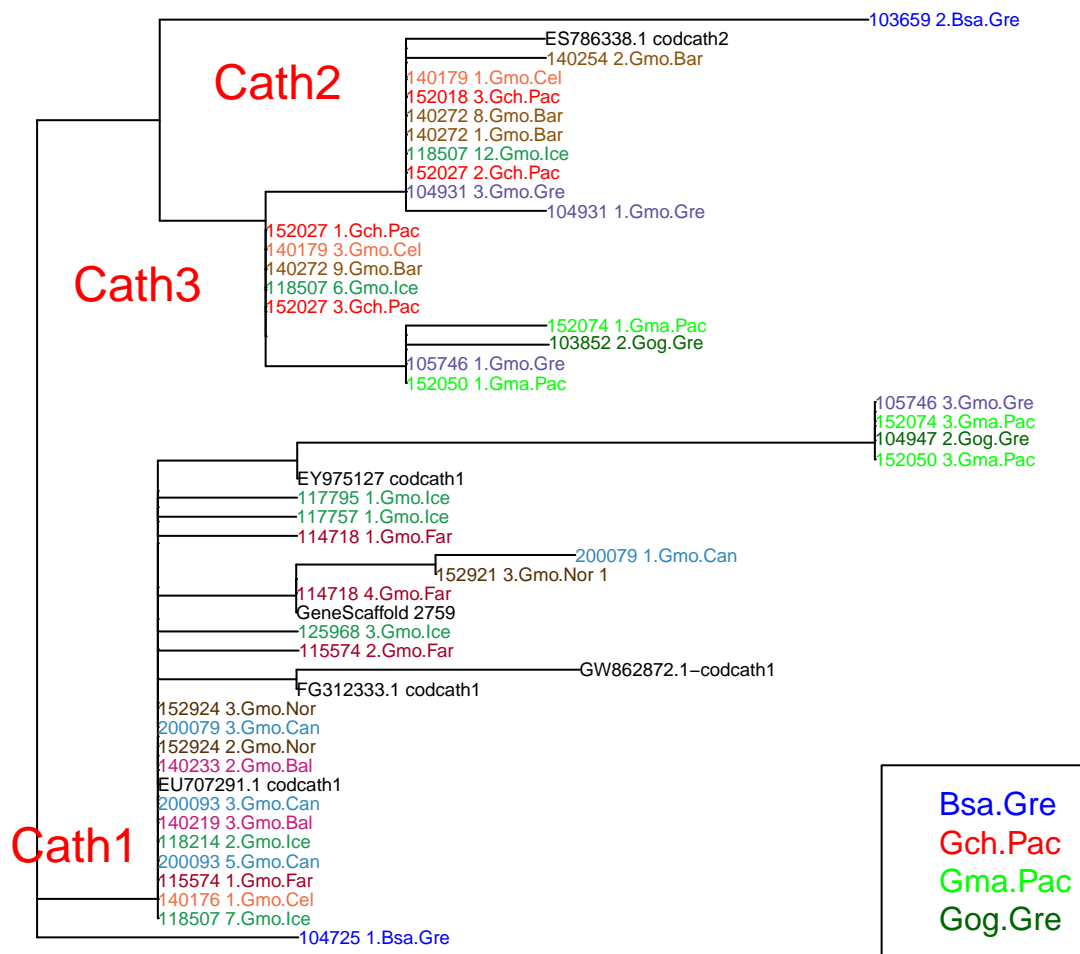
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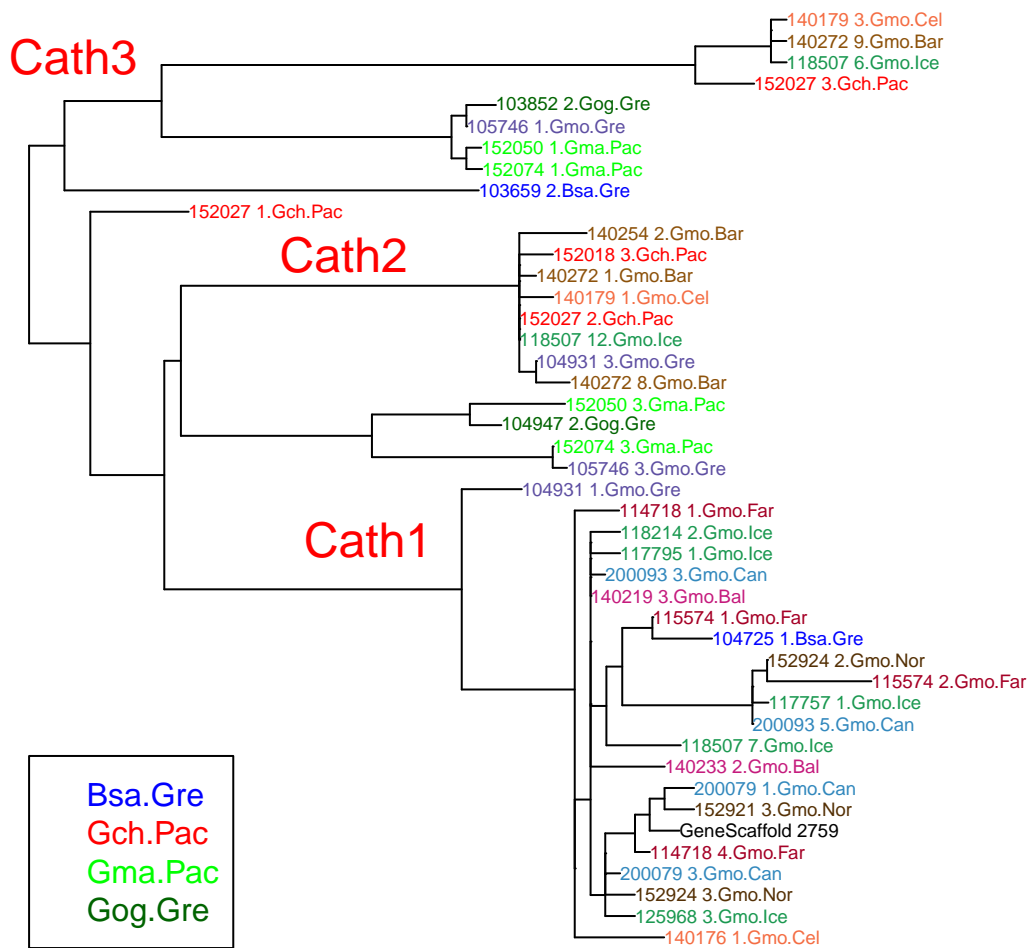




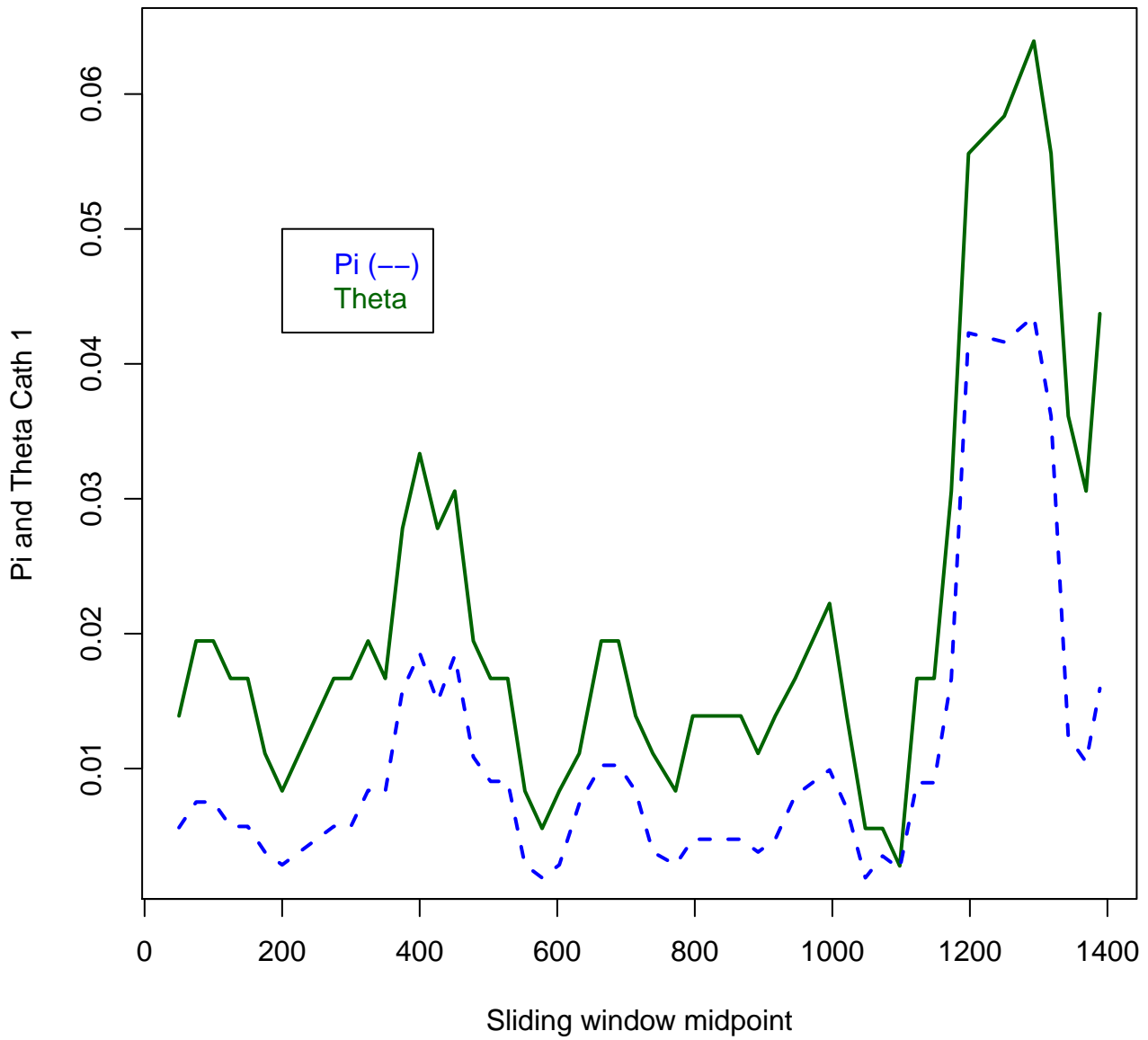
**Figure S2.** Alignment of nucleotide sequences of cathelicidin among clones from various individuals of Atlantic cod and four closely related taxa. Bsa.Gre (*Boreogadus saida*), Gch.Pac (*Gadus chalcogrammus*), Gma.Pac (*Gadus macrocephalus*), Gog.Gre (*Gadus ogac*) and Gmo (*Gadus morhua*) from various locations; Iceland (Gmo.Ice), Greenland (Gmo.Gre), Barents Sea (Gmo.Bar), Celtic Sea (Gmo.Cel), Baltic Sea (Gmo.Bal), Norway (Gmo.Nor), Faroe Islands (Gmo.Far), Canada (Gmo.Can).



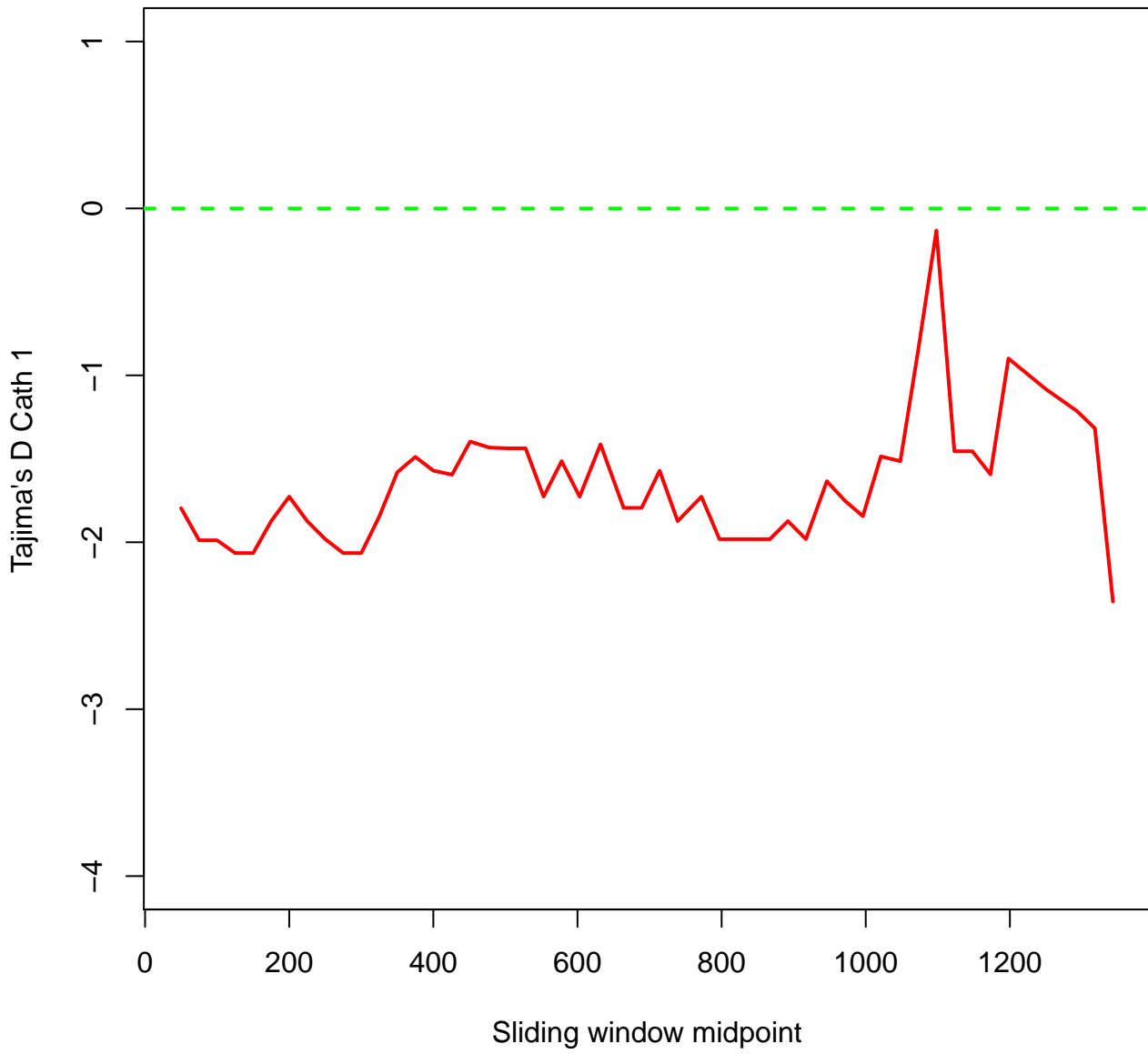
**Figure S3.** Maximum likelihood phylogenetic tree of Cathelicidin amino acid sequences of the conserved part. Phylogenetic tree built on amino acid sequences in exons 1, 2, and 3 combined, the conserved part of cathelicidin, of clones from various individuals of Atlantic cod and four closely related taxa. Bsa.Gre (*Boreogadus saida*), Gch.Pac (*Gadus chalcogrammus*), Gma.Pac (*Gadus macrocephalus*), Gog.Gre (*Gadus ogac*) and Gmo (*Gadus morhua*) from various locations; Iceland (Gmo.Ice), Greenland (Gmo.Gre), Barents Sea (Gmo.Bar), Celtic Sea (Gmo.Cel), Baltic Sea (Gmo.Bal), Norway (Gmo.Nor), Faroe Islands (Gmo.Far), Canada (Gmo.Can).



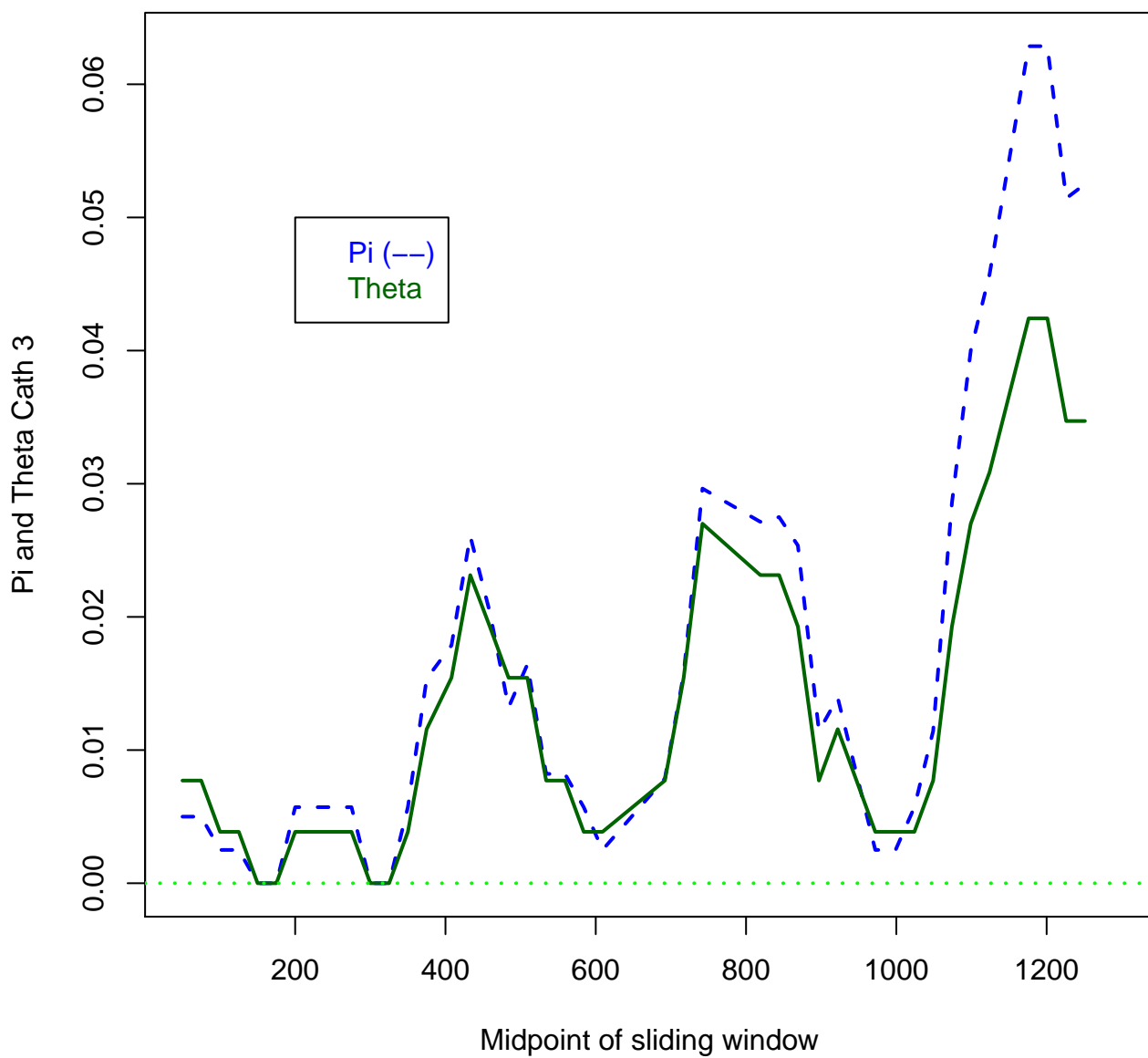
**Figure S4.** Maximum likelihood phylogenetic tree of nucleotide sequences. Phylogenetic tree of nucleotide sequences of the cathelicidin gene from various individuals of Atlantic cod and four sister taxa. Bsa.Gre (*Boreogadus saida*), Gch.Pac (*Gadus chalcogrammus*), Gma.Pac (*Gadus macrocephalus*), Gog.Gre (*Gadus ogac*) and Gmo (*Gadus morhua*) from various locations; Iceland (Gmo.Ice), Greenland (Gmo.Gre), Barents Sea (Gmo.Bar), Celtic Sea (Gmo.Cel), Baltic Sea (Gmo.Bal), Norway (Gmo.Nor), Faroe Islands (Gmo.Far), Canada (Gmo.Can).



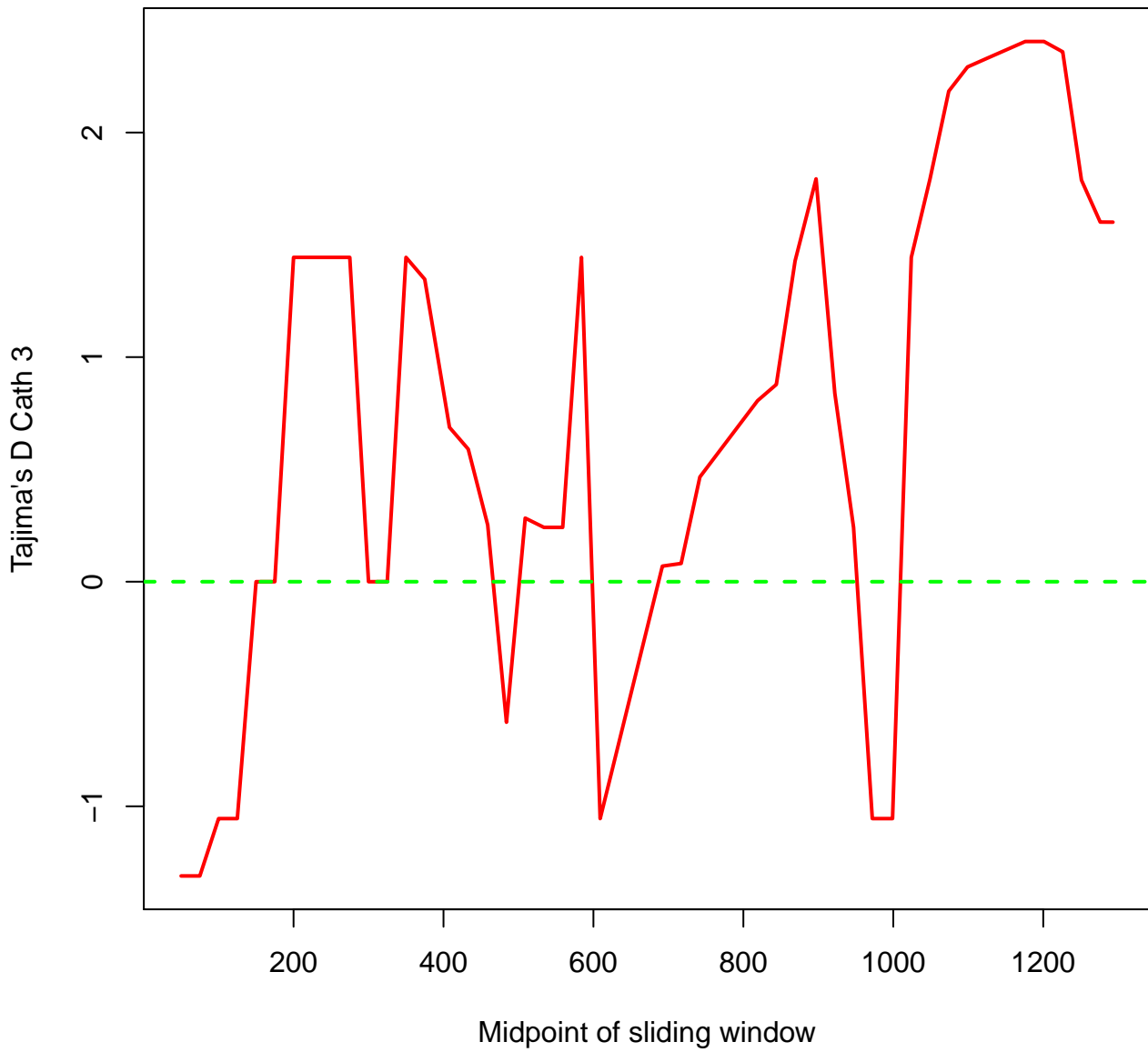
**Figure S5.** Sliding window analysis of nucleotide diversity  $\pi$  and the scaled mutation rate  $\theta$  for Cath1. Window length was 100 bp with a 25 bp step size.



**Figure S6.** Sliding window Tajima's  $D$  for Cath1. Window length was 100 bp with a 25 bp step size.



**Figure S7.** Sliding window analysis of nucleotide diversity  $\pi$  and the scaled mutation rate  $\theta$  for Cath3. Window length was 100 bp with a 25 bp step size.



**Figure S8.** Sliding window Tajima's  $D$  for Cath3. Window length was 100 bp with a 25 bp step size.