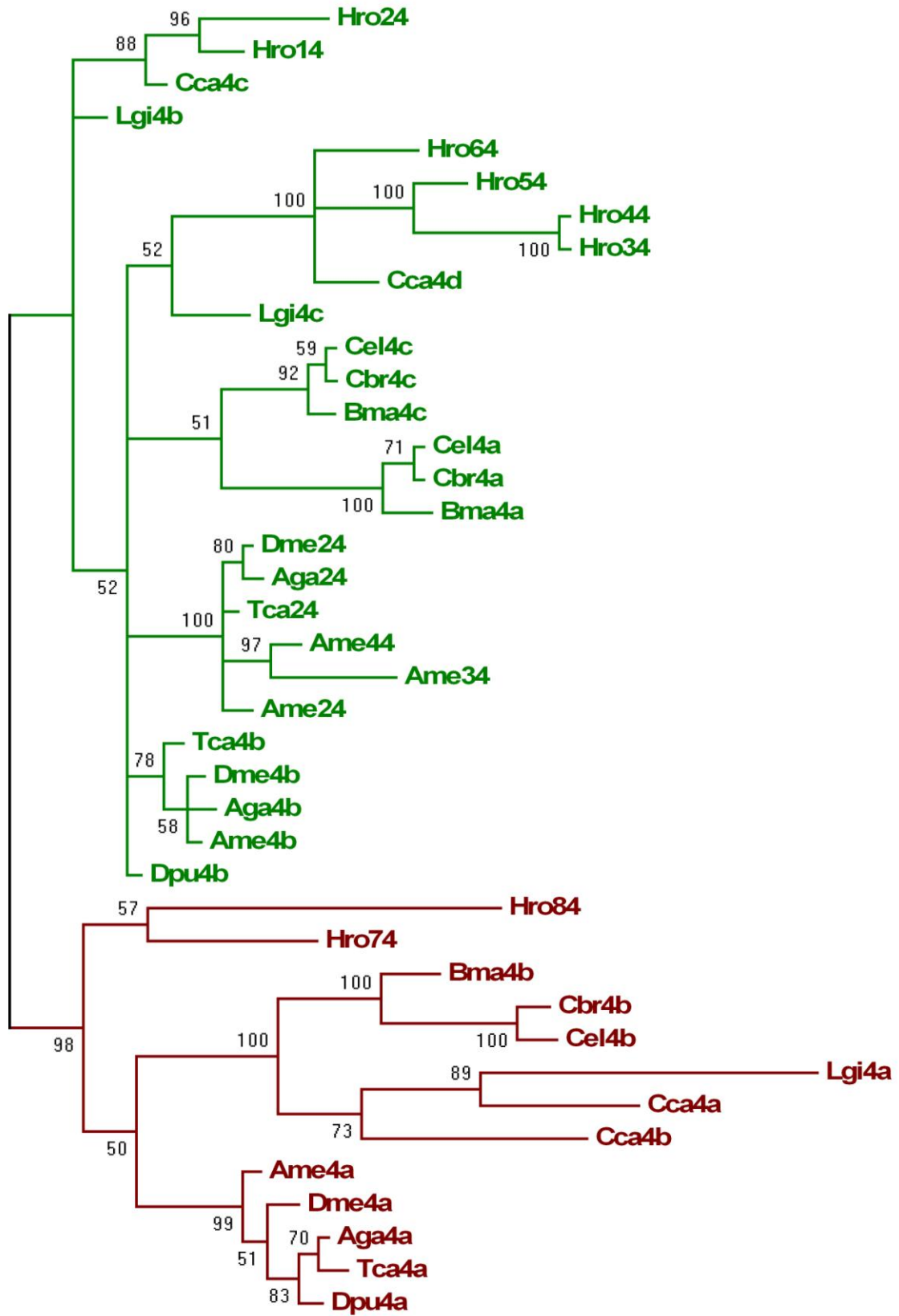
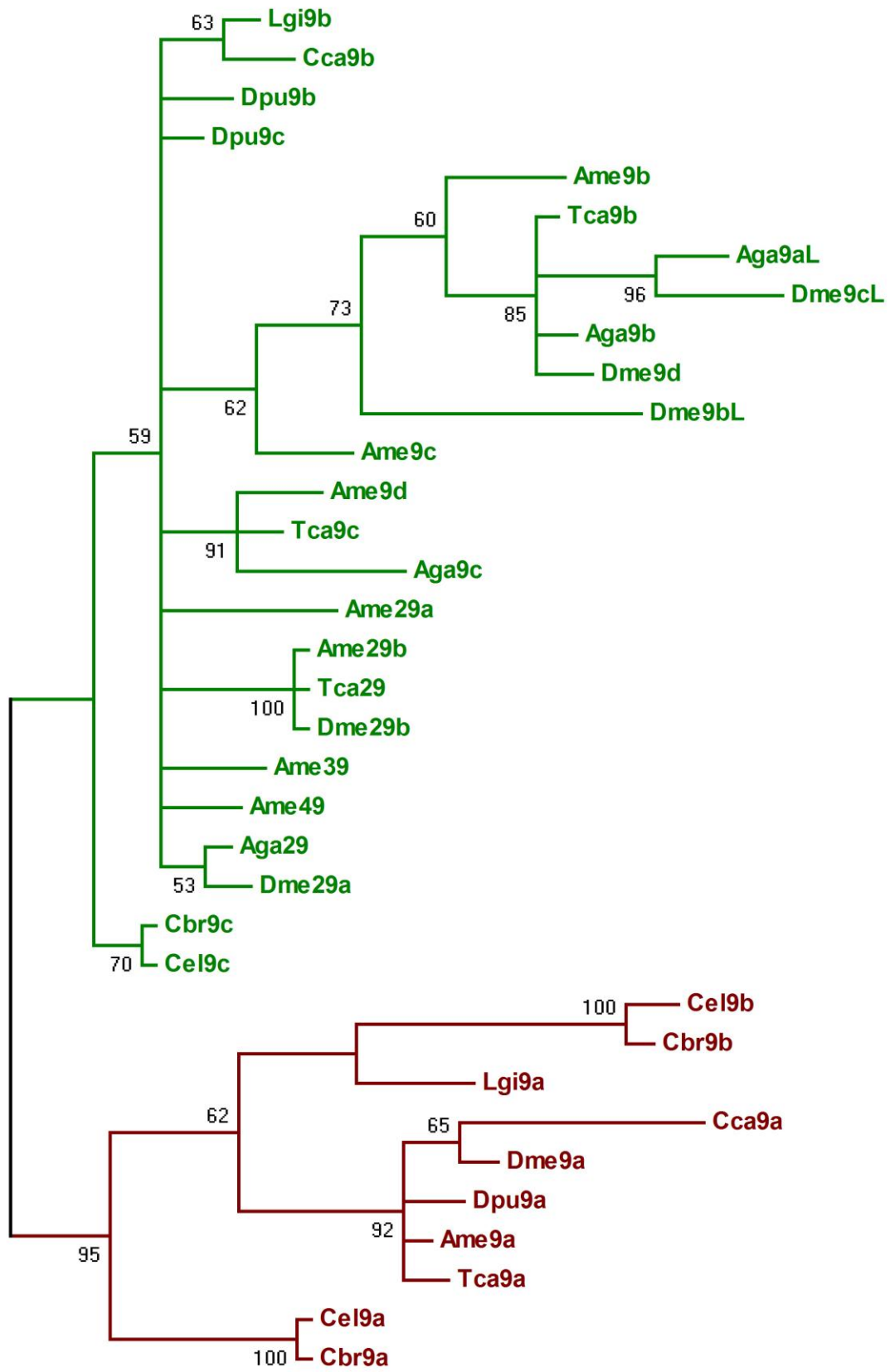


**Figure S4**

A)



B)



**Figure S4 - Phylogenetic analysis of the MATE exons 4 and 9 in protostomes**

A) Bayesian inference tree of exons 4 estimated under the JTT +  $\Gamma$  model as recommended by Prottest. B) Bayesian inference tree of exons 9 estimated under the RtRev +  $\Gamma$  model as recommended by Prottest. Long- (green branches) and short-associated (red branches) exons group with each other and with the corresponding exons from the long or short paralogs from *H. robusta* indicating subfunctionalization of the latest. Species are abbreviated as follows: Aga, *Anopheles gambiae*; Ame, *Apis mellifera*; Bma, *Brugia malayi*; Cbr, *Caenorhabditis briggsae*; Cca, *Capitella capitata*; Cel, *Caenorhabditis elegans*; Dme, *Drosophila melanogaster*; Dpu, *Daphnia pulex*; Hro, *Helobdella robusta*; Lgi, *Lottia gigantea*; Tca, *Tribolium castaneum*. Numbers next to the nodes indicate posterior probabilities.