Supplementary Information for: A random effects branch-site model for detecting episodic diversifying selection.

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Key words: episodic selection, random effects model, evolutionary model, branch-site model

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Mol. Biol. Evol. 24(1):1–3. 2008
doi:10.1093/molbev/msl161
Advance Access publication October 25, 2008

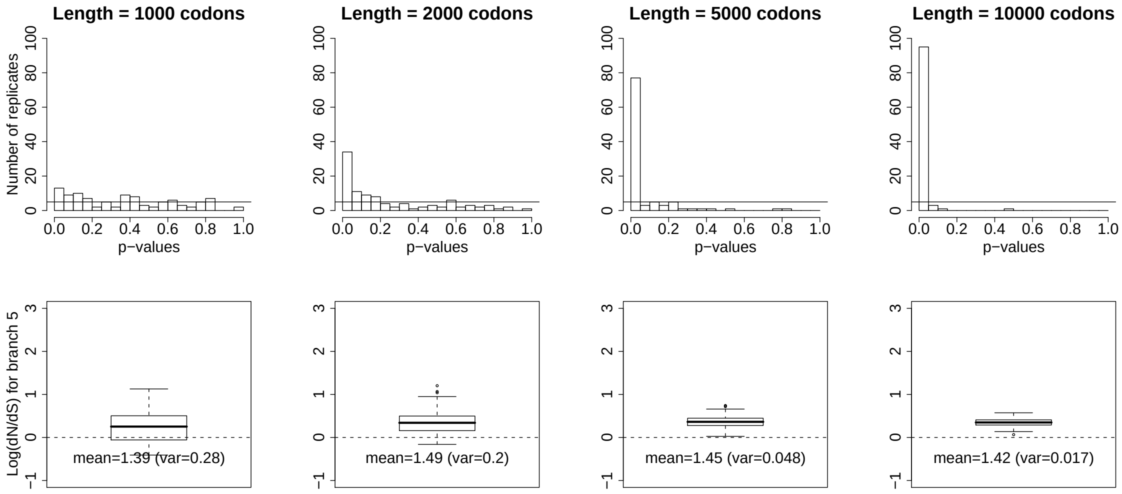

FIG. S1.—P-values of the test for selection along branch 5 for RS1 based on 100 replicates, and estimates of ω along branch 5 under the alternative (M_A) model. The horizontal line on p-value plots shows the expected distribution of p-values if the null model were true. ω estimates for the rBS model are plotted on the log scale to include outliers, but means and variances for the actual values are given (dashed line corresponds to the correct value $\omega = 1$).

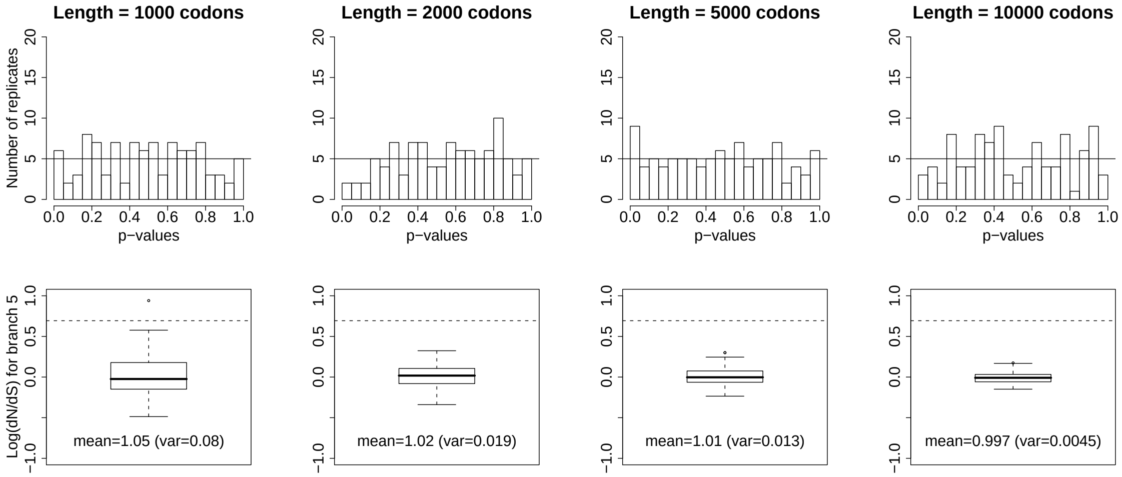

FIG. S2.—P-values of the test for selection along branch 5 for RS2 based on 100 replicates, and estimates of ω along branch 5 under the alternative (M_A) model. The horizontal line on p-value plots shows the expected distribution of p-values if the null model were true. ω estimates for the rBS model are plotted on the log scale to include outliers, but means and variances for the actual values are given (dashed line corresponds to the correct value $\omega = 2$).

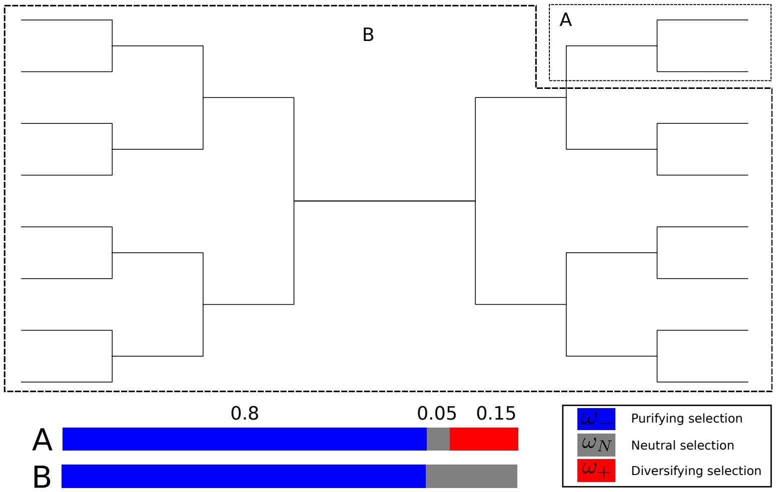

Fig. S3.—The 16-taxon tree used for simulations, each branch is 0.1 substitutions long, except for the middle branch which is 0.2 substitutions long). Branches in box (A) had an evolutionary configuration depicted in the colored bar (A) and the rest of the branches had configuration (B).