Test of substitution saturation (Xia et al. 2003; Xia and Lemey 2009) Testing whether the observed Iss is significantly lower than Iss.c. Part I. For a symmetrical tree. ______ Prop. invar. sites 0.0000 Mean H 0.9201 Standard Error 0.0193 1.9102 Hmax 0.4817 lss lss.c 0.7537 Т 14.0910 DF 1016 Prob (Two-tailed) 0.0000 95% Lower Limit 0.4438 95% Upper Limit 0.5196 ______ Part II. For an extreme asymmetrical (and generally very unlikely) tree. ______ lss.c 0.4681 Т 0.7061 DF 1016 Prob (Two-tailed) 0.4803 95% Lower Limit 0.4438 95% Upper Limit 0.5196 ______ Interpretation of results:

Significant Difference

Yes No

lss < lss.c Little Substantial

saturation saturation

lss > lss.c Useless Very poor

sequences for phylogenetics

Please cite:

Xia, X., Z. Xie, M. Salemi, L. Chen, Y. Wang. 2003. An index of substitution saturation and its application. Molecular Phylogenetics and Evolution 26:1-7.

Xia, X. and Lemey, P. 2009. Assessing substitution saturation with DAMBE. Pp. 615-630 in Philippe Lemey, Marco Salemi and Anne-Mieke Vandamme, eds. The Phylogenetic Handbook: A Practical Approach to DNA and Protein Phylogeny. 2nd edition Cambridge University Press.