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 1.0408 Mean H Standard Error 0.0287 Hmax 1.8578 0.5602 lss 0.7951 lss.c Т 8.1797 DF 2072 Prob (Two-tailed) 0.0000 95% Lower Limit 0.5039 95% Upper Limit 0.6165 \_\_\_\_\_\_ Part II. For an extreme asymmetrical (and generally very unlikely) tree. \_\_\_\_\_\_ lss.c 0.5975 1.2999 Т DF 2072 Prob (Two-tailed) 0.1938 95% Lower Limit 0.5039 95% Upper Limit 0.6165 \_\_\_\_\_\_ 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.