

Testing whether the observed I_{ss} is significantly lower than I_{ss.c}.

Part I. For a symmetrical tree.

Prop. invar. sites	0.0000
Mean H	0.6088
Standard Error	0.0275
Hmax	1.9288
I _{ss}	0.3157
I _{ss.c}	0.7944
T	17.3962
DF	2225
Prob (Two-tailed)	0.0000
95% Lower Limit	0.2617
95% Upper Limit	0.3696

Part II. For an extreme asymmetrical (and generally very unlikely) tree.

I _{ss.c}	0.5266
T	7.6670
DF	2225
Prob (Two-tailed)	0.0000
95% Lower Limit	0.2617
95% Upper Limit	0.3696

Interpretation of results:

Significant Difference

Yes No

I _{ss} < I _{ss.c}	Little saturation	Substantial saturation
I _{ss} > I _{ss.c}	Useless sequences	Very poor 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.