

Table S15: Statistical support of the 19 alternative topologies inferred from dataset sm-nt123. Statistical tests include (1) deltaL (logL difference from the maximal logL in the dataset), (2) bp-RELL (bootstrap proportion using RELL method), (3) *p*-KH (*p*-value of one sided), (3) *p*-SH (*p*-value of Shimodaira-Hasegawa test), (4) c-ELW (Expected Likelihood Weight), and *p*-AU (*p*-value of approximately unbiased test as implemented in IQtree. The KH, SH and AU tests return *p*-values, thus a tree is rejected if its *p*-value < 0.05 (labeled in red).

Tree	logL	deltaL	bp-RELL	p-KH	p-SH	c-ELW	p-AU
4	-10428664.38	0	0.0863	0.506	1	0.0866	0.677
14	-10428665.4	1.0192	0.118	0.494	0.947	0.117	0.597
3	-10428666.55	2.1733	0.0497	0.318	0.992	0.0487	0.523
15	-10428667.59	3.2139	0.0608	0.476	0.92	0.0633	0.389
16	-10428668.91	4.5245	0.0361	0.219	0.976	0.0363	0.378
5	-10428669.46	5.0816	0.0821	0.386	0.948	0.0824	0.502
1	-10428670.52	6.1431	0.098	0.453	0.882	0.0978	0.453
13	-10428671.44	7.0608	0.0114	0.17	0.966	0.0128	0.201
11	-10428671.64	7.2605	0.0449	0.348	0.934	0.0449	0.362
17	-10428672.67	8.288	0.173	0.43	0.832	0.171	0.455
18	-10428673.77	9.389	0.115	0.44	0.812	0.114	0.46
2	-10428676.67	12.287	0.109	0.432	0.772	0.109	0.41
12	-10428752.3	87.918	0.007	0.0331	0.25	0.00697	0.0515
10	-10428752.49	88.106	0.0095	0.0384	0.255	0.00949	0.0857
7	-10428787.51	123.13	0	0	0.0786	3.12E-31	4.63E-31
6	-10428796.95	132.57	0	0	0.061	1.94E-38	0.00402
8	-10428817.06	152.68	0	0	0.0263	9.07E-45	2.10E-34
9	-10428821.16	156.78	0	0	0.0229	4.47E-46	0.0871
19	-10428832.51	168.13	0	0	0.0163	1.57E-52	0.0322