

**Table S4:** Scoring matrix for branch points based on matrices from Gao *et al.* (2008), where 0 is the location of the branch point and the scores are the probability of a base not appearing at a position.

	-5	-4	-3	-2	-1	0	1	2	3
A	0.746	0.768	0.917	0.934	0.834	0.077	0.818	0.698	0.799
C	0.790	0.773	0.530	0.840	0.552	0.967	0.669	0.726	0.609
G	0.746	0.807	0.873	0.972	0.823	0.983	0.934	0.888	0.888
T	0.718	0.652	0.680	0.254	0.790	0.972	0.580	0.687	0.704