

Table S5 Results of site model analyses on teleost *Ddx3* ML gene trees.

Tree	Model	$\ln L$	κ	Parameters ^a			Null	LRT	df	P
				ω_0/p	ω_1/q	ω_2/ω_p				
<i>Ddx3a</i>	M0	-	1.870	0.079			n/a			
		12069.904								
	M1a	-	1.967	0.042(90.37%)	1.000(9.63%)		n/a			
		11828.656								
	M2a	-	1.967	0.042(90.37%)	1.000(9.63%)	37.503(0)	M1a	0	2	1.000
		11828.656								
	M3	-	1.872	0.013(74.49%)	0.217(20.62%)	0.813(4.89%)	M0	647.126	4	0
		11746.341								
<i>Ddx3b</i>	M7	-	1.865	0.190	1.672		n/a			
		11753.109								
	M8a	-	1.891	0.224	2.438	1.000(4.47%)	n/a			
		11753.656								
	M8	-	1.873	0.242	3.063	1.000(2.94%)	M7	14.846	2	0
		11745.686								
							M8a	15.940	1	0
<i>Ddx3b</i>	M0	-	1.799	0.057			n/a			
		10427.457								
	M1a	-	1.873	0.046(95.89%)	1.000(4.11%)		n/a			
		10379.321								
	M2a	-	1.873	0.046(95.89%)	1.000(4.11%)	50.201 (0)	M1a	0	2	1.000
		10379.321								
	M3	-	1.797	0.010(71.32%)	0.178(28.17%)	1.431(0.51%)	M0	272.736	4	0
		10291.089								
<i>Ddx3b</i>	M7	-	1.793	0.285	4. 030		n/a			
		10293.577								
	M8a	-	1.791	0.230	2. 714	1.000(0.67%)	n/a			
		10292.146								
<i>Ddx3b</i>	M8	-	1.800	0.306	4.651	1.494(0.42%)	M7	4.892	2	0.087

Abbreviations: **InL**, ln likelihood; **κ** , transition/transversion ratio; **LRT**, likelihood ratio test statistic; **df**, degrees of freedom; **P**, P-value; **n/a**, not applicable.

a: ω values of each site class are shown for models M0-M3 (ω_b - ω_2) with the proportion of each site class in parentheses. For M7-M8, the shape parameters, p and q, which describe the beta distribution are listed. In addition, the ω value for the positively selected site class (ω_b , with the proportion of sites in parentheses) is shown for M8a (where ω_b is constrained to equal one) and M8.