Table S6 Selection pressure analysis (site model) of the MEKK subfamily across thein animal kingdoms.

Model	**-lnL**	**df**	**2ΔlnL**	***P* value**	**Parameter**	**Positive selection site**
M0	298288.110904				ω=0.11015	
M1a	294461.554715				p_0=0.69522, p_1=0.30478，ω_0=0.08234, ω_1=1.00000	Not allowed
M2a	294461.554715	2	0 (M1a vs. M2a)	1	p_0=0.69522, p_1=0.10566, p_2=0.19912, ω_0=0.08234, ω_1=1.00000, ω_2=1.00000	None
M7	289192.009374				p=0.63141, q=2.52230	Not allowed
M8	288930.363013	2	523.292722 (M7 vs. M8)	2.3358E-114	p_0=0.86632, p=0.85250, q=5.99491, p_1=0.13368, ω=1.04259	None
		1	0.719146 (M8a vs. M8)	6.9797E-1		
M8a	288930.722586				p_0=0.86219, p=0.85950, q=6.14213, p_1=0.13781, ω=1.00000	Not allowed