

S2 Table. Ka/Ks calculation. Values of Ka/Ks for the Sox9 domains, including the p-value and model of evolution.

Tests	Sp1	Sp2	Ka/Ks	P-Value(Fisher)	Result	Model
Sox9 and Sox9a						
DIM	Danio rerio	Homo sapiens	0.0113724	0	purifying selection	F81
HMG	Danio rerio	Homo sapiens	0.00180382	0	purifying selection	F81
K2	Danio rerio	Homo sapiens	0.0433189	1.41E-35	purifying selection	HKY
PQS	Danio rerio	Homo sapiens	0.0213095	0	purifying selection	TN
Sox9 and Sox9b						
DIM	Homo sapiens	Monopterus albus	0.016088	0	purifying selection	F81
HMG	Homo sapiens	Monopterus albus	0.00197404	0	purifying selection	F81
K2	Homo sapiens	Monopterus albus	0.0687748	0	purifying selection	TVM
PQS	Homo sapiens	Monopterus albus	0.0161906	0	purifying selection	TN
Sox9a and Sox9b						
DIM	Danio rerio	Monopterus albus	0.011934	6.48E-40	purifying selection	F81
HMG	Danio rerio	Monopterus albus	0.001	6.13E-27	purifying selection	HKY
K2	Danio rerio	Monopterus albus	0.0467966	0	purifying selection	TVM
PQS	Danio rerio	Monopterus albus	0.0162497	0	purifying selection	TIM