Evolutionary conservation of the circadian gene *timeout* in Metazoa

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Supplementary Tables

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Table S1. CDS length, gene length and intron length of timeout gene in Metazoa

Species	Gene Length	Intron Length	CDS Length
Mouse	20878	17287	3591
Rat	24041	20423	3618
Degu	16890	13254	3636
Guinea pig	15653	12044	3609
Naked mole rat	24763	21133	3630
Rabbit	18117	14502	3615
Pika	16624	12973	3651
Pig	24981	21360	3621
Human	33043	29416	3627
Gibbon	14224	11662	2562
Rhesus	36723	33102	3621
Marmoset	21959	18146	3813
Tree shrew	36404	32759	3645
Yak	25329	21672	3657
Cow	26330	22721	3609
Sheep	13239	9558	3681
Tibetan antelope	23273	19628	3645
Dolphin	13958	10334	3624
Cat	30138	26514	3624
Dog	28940	25286	3654
Panda	13070	9449	3621
Myotis	31001	27386	3615
Horse	22611	18975	3636
Hedgehog	11912	8543	3369
Manatee	29675	26060	3615
Armadillo	38092	34621	3471
Opossum	17116	15076	2040
Tasmanian devil	26937	23125	3812
Platypus	8503	4981	3522
Ground-tit	8627	5565	3062
Turtle	2143	1585	558
Coelacanth	31128	27231	3897
Tilapia	13879	10141	3738
Platyfish	13630	9703	3927
Fugu	9141	5328	3813
Zebrafish	37755	33918	3837
Spotted gar	20035	16471	3564
Sea squirt	13821	10626	3195
Domestic silkworm	33241	29467	3774
Fruit fly	75225	71070	4155
Pea aphid	11576	7205	4371
Human body louse	18334	15772	2562
Caenorhabditis elegans	9679	5617	4062
Guillardia theta	4489	688	3801

Table S2. Lineages tested for positive selection by a branch-site model using PAML software

Models	P	LnL	Parameters				Positive selected sites	
One-ratio	101	-114508.250090	W0= 0.13113				none	
M1a	102	-112556.831571	P0= 0.71292, p1=0.28708, W0=0.08790, w1=1.00000				NA	
M2a	104	-112556.831571	P0=0.71292, p1=0.28708, p2=0.00000				926 Y 0.982*	
			W0=0.08790, w1=1.00000, w2=999.00000					
M7	102	-111691.578889	p = 0.82399, q = 3.02260				NA	
M8	104	-111519.956246	p0 = 0.83583, p1 = 0.16417, p = 1.40195,				926 Y 0.991**	
			q = 10.12158, w = 1.00000				1910 A 0.965*	
Branch-site 1	104	-112523.724611	site class	0	1	2a	2b	788 A 0.956*
(other insects-Timeless)			proportion	0.62027	0.25034	0.09218	0.03720	850 A 0.970*
			background w	0.08847	1.00000	0.08847	1.00000	1135 A 0.963*
			foreground w	0.08847	1.00000	999.00000	999.00000	1303 S 0.957*
								1529 F 0.981*
								1557 A 0.966*
								1690 G 0.990**
								1789 Q 0.965*
								2135 E 0.960*
								2248 E 0.997**
Branch-site null 1	103	-112550.141194	site class	0	1	2a	2b	N/A
(other insects-Timeless)			proportion	0.60035	0.24256	0.11188	0.04520	
			background w	0.08765	1.00000	0.08765	1.00000	
			foreground w	0.08765	1.00000	1.00000	1.00000	

Branch-site 2	104	-112498.658394	site class	0	1	2a	2b	132 S 0.955*
(Lepidoptera-Timeless)			proportion	0.56439	0.22809	0.14779	0.05973	133 A 0.980*
			background w	0.08880	1.00000	0.08880	1.00000	145 H 0.967*
			foreground w	0.08880	1.00000	220.60439	220.60439	158 D 0.983*
								169 T 0.970*
								197 Q 0.951*
								199 G 0.969*
								255 P 0.975*
								297 L 0.954*
								299 Q 0.966*
								341 K 0.955*
								352 A 0.973*
								373 F 0.970*
								377 S 0.967*
								536 R 0.998**
								539 V 0.988*
								551 R 0.969*
								567 R 0.990*
								635 V 0.982*
								636 R 0.989*
								643 C 0.992**
								654 C 0.951*
								662 V 0.971*
								676 L 0.974*
								701 A 0.996**
								738 F 0.991**

761 T 0.956*
762 N 0.987*
766 M 0.994**
769 T 0.966*
771 R 0.961*
784 L 0.985*
812 T 0.950*
845 R 0.998**
850 A 0.980*
855 F 0.981*
894 L 0.973*
902 K 0.982*
903 R 0.966*
931 L 0.999**
932 E 0.979*
933 A 0.997**
950 L 0.969*
1130 L 0.978*
1135 A 0.990**
1287 S 0.991**
1291 F 0.998**
1334 L 0.976*
1340 M 0.998**
1342 A 0.984*
1348 S 0.955*
1355 R 0.997**

1359 D 0.972*
1365 A 0.964*
1386 K 0.979*
1390 L 0.979*
1394 N 0.994**
1521 E 0.988*
1523 Q 0.956*
1525 L 0.953*
1536 D 0.981*
1564 L 0.999**
1576 E 0.973*
1690 G 0.979*
1698 L 0.968*
1782 M 1.000**
1785 E 0.973*
1801 P 0.979*
1834 W 0.959*
1903 L 0.984*
2169 L 0.970*
2170 D 1.000**
2193 E 0.978*
2248 E 0.960*

Branch-site null 2 (Lepidoptera-Timeless)	103	-112521.439166	site class	0	1	2a	2b	N/A
			proportion	0.53825	0.21794	0.17354	0.07027	
			background w	0.08741	1.00000	0.08741	1.00000	
			foreground w	0.08741	1.00000	1.00000	1.00000	
Branch-site 3 (multicellular animals-Timeout)	104	-112532.035506	site class	0	1	2a	2b	453 Q 0.953*
			proportion	0.53405	0.21462	0.17928	0.07205	
			background w	0.08784	1.00000	0.08784	1.00000	
			foreground w	0.08784	1.00000	999.00000	999.00000	
Branch-site null 3 (multicellular animals-Timeout)	103	-112548.648664	site class	0	1	2a	2b	N/A
			proportion	0.55419	0.22275	0.15911	0.06395	
			background w	0.08744	1.00000	0.08744	1.00000	
			foreground w	0.08744	1.00000	1.00000	1.00000	
Branch-site 4 (Insecta-Timeout)	104	-112517.395389	site class	0	1	2a	2b	128 L 0.984*
			proportion	0.61670	0.24724	0.09712	0.03894	238 Q 0.988*
			background w	0.08770	1.00000	0.08770	1.00000	246 F 0.991**
			foreground w	0.08770	1.00000	999.00000	999.00000	294 Y 0.955*
								364 L 0.981*
								368 D 0.999**
								376 S 0.995**
								393 W 0.997**
								421 Q 0.980*
								471 G 0.976*
								509 H 0.963*

								745 S 0.994**
								761 T 0.965*
								794 A 0.964*
								822 E 0.963*
								827 E 0.961*
								971 Q 0.998**
								1017 V 0.958*
								1243 R 0.953*
								1275 E 0.959*
								1296 Y 0.993**
								1309 Y 0.990**
								1338 L 0.996**
								1458 E 0.976*
								1485 V 0.963*
								1721 R 0.978*
								1900 S 0.975*
Branch-site null 4	103	-112543.311568	site class	0	1	2a	2b	N/A
(Insecta-Timeout)			proportion	0.60538	0.24375	0.10756	0.04331	
			background w	0.08703	1.00000	0.08703	1.00000	
			foreground w	0.08703	1.00000	1.00000	1.00000	

Branch-site 5 (Vertebrata-Timeout)	104	-112556.831571	site class	0	1	2a	2b	125 C 0.982*
			proportion	0.71292	0.28708	0.00000	0.00000	485 G 0.970*
			background w	0.08790	1.00000	0.08790	1.00000	829 S 0.968*
			foreground w	0.08790	1.00000	1.00000	1.00000	1839 K 0.988*
								1902 S 0.993**
								2171 S 0.988*
Branch-site null 5 (Vertebrata-Timeout)	103	-112534.780713	site class	0	1	2a	2b	N/A
			proportion	0.60864	0.24433	0.10491	0.04212	
			background w	0.08662	1.00000	0.08662	1.00000	
			foreground w	0.08662	1.00000	1.00000	1.00000	
Branch-site 6 (Mammalia-Timeout)	104	-112556.831571	site class	0	1	2a	2b	206 S 0.970*
			proportion	0.71292	0.28708	0.00000	0.00000	372 L 0.989*
			background w	0.08790	1.00000	0.08790	1.00000	735 A 0.978*
			foreground w	0.08790	1.00000	1.00000	1.00000	901 K 0.958*
								1804 S 0.989*
Branch-site null 6 (Mammalia-Timeout)	103	-112546.285910	site class	0	1	2a	2b	N/A
			proportion	0.61537	0.24744	0.09785	0.03935	
			background w	0.08668	1.00000	0.08668	1.00000	
			foreground w	0.08668	1.00000	1.00000	1.00000	

Branch-site 7 (Metatheria-Timeout)	104	-112546.170142	site class	0	1	2a	2b	536 R 0.999**
			proportion	0.69977	0.27963	0.01472	0.00588	
			background w	0.08709	1.00000	0.08709	1.00000	
			foreground w	0.08709	1.00000	11.34626	11.34626	
Branch-site null 7 (Metatheria-Timeout)	103	-112556.831571	site class	0	1	2a	2b	N/A
			proportion	0.71292	0.28708	0.00000	0.00000	
			background w	0.08790	1.00000	0.08790	1.00000	
			foreground w	0.08790	1.00000	1.00000	1.00000	
Branch-site 8 (Eutheria-Timeout)	104	-112548.260565	site class	0	1	2a	2b	253 S 0.975*
			proportion	0.70187	0.28013	0.01287	0.00514	1785 E 0.968*
			background w	0.08735	1.00000	0.08735	1.00000	
			foreground w	0.08735	1.00000	126.27496	126.274	
Branch-site null 8 (Eutheria-Timeout)	103	-112553.595412	site class	0	1	2a	2b	N/A
			proportion	0.67531	0.27082	0.03845	0.01542	
			background w	0.08705	1.00000	0.08705	1.00000	
			foreground w	0.08705	1.00000	1.00000	1.00000	