

Additional File 3. Alignment of 5S rRNA gene sequences from several vertebrates. The 5S gene of lampreys and diverse bony fish orders are majority-rule consensus (MRC) sequences obtained from data source listed in the Supplementary file 1. (s) somatic type; (o) oocyte type. Sequences generated in the present study are underlined.

<i>Petrom</i>	MRC	CTCGGAAGCT	AAGCAGGGTC	GAGCCTGGTT	AGTACTTGGA	TGGGAGACCG	CCTGGGAATA	CCAGGTGTTG	TAGGCTT-
<i>Pfalkneri01</i>		C.	AG.....			G.....	CC.		.....
<i>Pfalkneri02</i>		C.	AG.....			G	CC.		.....
<i>Pfalkneri03</i>		C.	AG.....				CC.		.....
<i>Pmotoro01</i>		C.	AG.....				CC.		.....
<i>Pmotoro02</i>		C.	AG.....				CC.		.....
<i>Pmotoro03</i>		C.	AG.....				CC.		.....
<i>Pmotoro04</i>		C.	AG.....				CC.		.....
<i>Pmotoro05</i>		C.	AG.....				CC.		.....
<i>Pmotoro06</i>		C.	AG.....				CC.		.....
<i>Paiereba06</i>		C.	AG..G.				CC.		.....
<i>Paiereba01</i>		C.	AG.....		C.....		CC.		.....
<i>Paiereba02</i>		C.	AG.....			..A.....	CC.		.....
<i>Paiereba03</i>		C.	AG.....				CC.		.....
<i>Paiereba04</i>		T.	C.	AG.....	A.		CC.	C.	.....
<i>Paiereba05</i>		T.	C.	AG.....	G.....		CC.		.....
<i>Paiereba07</i>		C.	AG.....				CC.		.....
<i>Pmotoro11</i>		..T.....	AC.	AG.....		T.	CA.		.....
<i>Pmotoro12</i>		..T.....	AC.	AG.....		T.	CA.		.....
<i>Pmotoro13</i>		..T.....	AC.	AGN.....		T.	CA.		.....
<i>Pmotoro14</i>		..T.....	AC.	AG.....		T.	CA.		.....
<i>Pmotoro15</i>		..T.....	..A.....	AC.	AG.....	T.	CA.		.....
<i>Pmotoro16</i>		..T.....	AC.	AG.....		T.	CA.		.....
<i>Pfalkneri21</i>		..T.....	..A.....	AC.	AG.....	T.	CA.		.....
<i>Pfalkneri22</i>		..T.....	AC.	AG.....		T.	CA.		.....
<i>Pfalkneri23</i>		..T.....	AC.	AG.....		T.	..C.....	CA.	.....
<i>Pfalkneri24</i>		..T.....	AC.	AG.....		N..T.	..C.....	CA.	.....
<i>Pfalkneri25</i>		..T.....	AC.	AG.....		T.	CA.		.....
<i>Pfalkneri26</i>		..T.....	AC.	AG.....		T.	CA.		.....
<i>Paiereba31</i>		AC.	AG.....			..A.....	CA.		.....
<i>Paiereba32</i>		AC.	AG.....			..A.....	CA.		.....
<i>RlaliI</i>				..G.....			C.	..A.....	.....
<i>RporII</i>		C		..G.....			..C.....	..A.....	.....
<i>RlaliI</i>			AC.	AG.....			CA.		.....
<i>RporI</i>			AC.	AG.....			CA.		.....
<i>Asuper</i>		-.	..A.....	AC.	AG.....	T.	CA.		.....
<i>Gcuvier</i>			AC.	AG.....			CC.		.....
<i>Scanic</i>			AT.	AG.....			CA.		.....
<i>Doxyrin</i>			C.	AG.....			CC.		.....
<i>Rmir</i>			C.	AG.....			CC.		.....
<i>Rpoly</i>			C.	AG.....			CC.		.....
<i>Rclav</i>			C.	AG.....			CC.		.....
<i>RasteII</i>			C.	AG.....			CC.		.....
<i>RasteI</i>		TC.C		TAA	..G.....C		A.....T.	C.	..A.....
<i>Tlymma</i>			C.	AG.....			CC.		.....
<i>AcipMRC</i>		..A.....	AC.	..T	..G.....T		A.....T.	..A.....C.	A.T
<i>CyprimRC</i>			T.T	..G.....			C.	..A.....	.....
<i>CyprinoMRC</i>				..G.....		T.	C.	..A.....	.....
<i>GadiMRC</i>				..G.....			C.	..A.....	.....
<i>GastMRC</i>		..T.....		..T.....	C.	C..T.	C.	.....	.....
<i>PerciMRC</i>				..G.....C			CC.	..A.....	.....
<i>PleuroMRC</i>				..G.....			C.	..A.....	.....
<i>SalmoMRC</i>				..G.....		T.	C.	..A.....	.....
<i>Silu</i>		A	A..T	..G.....	T	AA	C.	.....	.....
<i>AnguiMRC</i>				..G.....			CA.	..A.....	.....
<i>Tetraodo</i>				..G.....C			C.	..A.....	.....
<i>BcephI</i>		..T.....		..G.....		T.	CC.	..GA.....	.....
<i>BSPII</i>		..T.....	T	..G.....CA	..T.....T.	..A.....T.	C.	..A.....	.....
<i>Lobt</i>			C.	..G.....			C.	..A.....	.....
<i>Calleg</i>		..A.....	C.T	..G.....		T.	C.	.....	.....
<i>Adavi</i>		..A.....	G.	..TT.A		T.	C.	.....	.....
<i>Ajapo</i>			T	..G.....		T.	..C.....	..C.....	T
<i>Xtrop(s)</i>			A	..G.....			T.	C.	.....
<i>Xtrop(o)</i>			A	..G.....T	C		T.	C.	.....
<i>Grioba</i>				..G.....			C.	.....	.....
<i>Nvirid</i>		..A.....T.		..G.....	C	T	C.	.....	.....
<i>Iguana</i>				..G.....			..G.....C	.....	.....
<i>Ggallus</i>				..G.....		T	G.....C	.....	.....
<i>Mfasc</i>				..G.....			G.....C	.....	.....
<i>Rnorv</i>				..G.....			G.....C	.....	.....
<i>Mmusc</i>				..G.....			G.....C	.....	.....
<i>Hsaplens</i>				..G.....			G.....C	.....	.....
<i>Sramster</i>				..G.....			G.....C	.....	.....
<i>Btaurus</i>				..G.....			G.....C	.....	.....