

Supplementary Table 2. Accession number of sequences used for phylogenetic analysis (Fig. 2B)

#	Source	Sequence ID ^a	Annotation
1	E	ENSGACP00000026868	<i>Gasterosteus aculeatus</i> androgen receptor protein.
2	G	AB012096	<i>Oncorhynchus mykiss</i> androgen receptor beta protein.
3	G	AB025361	<i>Anguilla japonica</i> androgen receptor beta protein.
4	G	EU517118	<i>Spinibarbus denticulatus</i> androgen receptor protein
5	E	ENSDARP00000088795	<i>Danio rerio</i> androgen receptor protein.
6	G	AY090897	<i>Carassius auratus</i> androgen receptor protein.
7	G	AY727529	<i>Pimephales promelas</i> androgen receptor protein.
8	G	AY701761	<i>Micropogonias undulatus</i> nuclear androgen receptor protein.
9	G	AB017158	<i>Pagrus major</i> androgen receptor protein.
10	G	AB012095	<i>Oncorhynchus mykiss</i> androgen receptor alpha protein.
11	G	AB023960	<i>Anguilla japonica</i> androgen receptor alpha protein.
12	G	AY647256	<i>Dicentrarchus labrax</i> androgen receptor protein.
13	E	ENSTNIP00000014780	<i>Tetraodon nigroviridis</i> androgen receptor protein.
14	G	AF326200	<i>Halichoeres trimaculatus</i> androgen receptor protein.
15	G	AY219702	<i>Acanthopagrus schlegelii</i> androgen receptor protein.
16	E	ENSTRUP00000031457	<i>Takifugu rubripes</i> androgen receptor protein.
17	T	AB099303	<i>Gambusia affinis</i> androgen receptor beta protein.
18	G	AY082342	<i>Astatotilapia burtoni</i> androgen receptor beta protein.
19	G	DQ339105	<i>Kryptolebias marmoratus</i> androgen receptor protein.
20	T	AB252679	<i>Oryzias latipes</i> androgen receptor beta protein
21	G	AB045212	<i>Oreochromis niloticus</i> androgen receptor beta protein.
22	T	AB193190	<i>Gallus gallus</i> androgen receptor protein.
23	E	ENSP00000379359	<i>Homo sapiens</i> androgen receptor protein.
24	G	AF532914	<i>Taeniopygia guttata</i> androgen receptor protein.
25	E	ENSXETP00000011091	<i>Xenopus tropicalis</i> androgen receptor protein.
26	T	AB428795	<i>Polypterus senegalus</i> androgen receptor protein.
27	T	AB213020	<i>Acipenser ruthenus</i> x <i>Huso huso</i> (bester) androgen receptor protein
28	T	AB428796	<i>Osteoglossum bicirrhosum</i> androgen receptor protein.
29	T	AB213019	<i>Chiloscyllium punctatum</i> androgen receptor protein.
30	G	DQ382340	<i>Leucoraja erinacea</i> androgen receptor protein.
31	E	ENSTNIP00000018864	<i>Tetraodon nigroviridis</i> androgen receptor protein.
32	E	ENSGACP00000024489	<i>Gasterosteus aculeatus</i> androgen receptor protein.
33	E	ENSTRUP00000012893	<i>Takifugu rubripes</i> androgen receptor protein.
34	T	AB252233	<i>Oryzias latipes</i> androgen receptor alpha protein.
35	T	AB174849	<i>Gambusia affinis</i> androgen receptor alpha protein.
36	G	AB045211	<i>Oreochromis niloticus</i> androgen receptor alpha protein.
37	G	AF121257	<i>Haplochromis burtoni</i> androgen receptor protein.

^aSequences were retrieved from GenBank (G),Ensembl (E), or determined in our study (T).