Supplementary Material

1 Supplementary Figures and Tables

Table S1. Protein sequences of androgen receptors used for phylogenetic analysis.

			Current Nomenclature		Proposed Nomenclature				
Order	**Species**	**Common Name**	**Protein**	**Gene**	**Protein**	**Gene**	**Database**	**Accession Number**	**References**
Petromyzontiformes	*Petromyzon marinus*	Sea lamprey	AR‡	*ar*‡	N/A	N/A	NCBI	XR_004404992.1	VGP, 2020
Rajiformes	*Leucoraja erinacea*	Little skate	AR	*ar*	Same	Same	NCBI	ABW79801.1	Engel & Callard, 2007
Chimaeriformes	*Callorhinchus milli*	Australian ghostshark	AR‡	*ar*‡	N/A	N/A	NCBI	AFP05315.1	Venkatesh et al., 2014
Semionotiformes	*Lepisosteus oculatus*	Spotted gar	AR‡	*ar*‡	N/A	N/A	NCBI	XP_006632826	Di Palma et al, 2011
Anguilliformes	*Anguilla japonica*	Japanese eel	ARα	*arα*	**ARβ1**	***ar2a***	NCBI	BAA75464.1	Todo et al., 1999
			ARβ	*arβ*	**ARβ2**	***ar2b***	NCBI	BAA83805.1	Ikeuchi et al., 1999
Cypriniformes	*Danio rerio*	Zebrafish	AR	*ar*	**ARβ**	***ar2***	NCBI	ABO21344.1	Jorgensen et al., 2007
Cypriniformes	*Carassius auratus*	Goldfish	AR	*ar*	**ARβ**	***ar2***	NCBI	AAM09278.1	Betka et al., 2002
Cyprinodontiformes	*Fundulus heteroclitus*	Atlantic killifish	AR	*ar*	**ARβ**	***ar2***	NCBI	XP_012720156.2	N/A
Cyprinodontiformes	*Poecilia mexicana*	Shortfin molly	ARα	*arα*	Same	***ar1***	NCBI	AKJ74866.1	Zhu et al., 2016
			ARβ	*arβ*	Same	***ar2***	NCBI	AKJ74869.1	Zhu et al., 2016
Cyprinodontiformes	*Gambusia affinis*	Western mosquitofish	AR	*ar*	**ARβ1**	***ar2a***	NCBI	BAD81045.1	Sone et al., 2005
			ARβ	*arβ*	**ARβ2**	***ar2b***	NCBI	BAD81046.1	Sone et al., 2005
Characiformes	*Astyanax mexicanus*	Mexican tetra	AR	*ar*	**ARβ**	***ar2***	NCBI	XP_007228437.3	McGaugh et al., 2014
Siluriformes	*Ictalurus punctatus*	Channel catfish	AR	*ar*	**ARβ**	***ar2***	NCBI	XP_017315035	Liu et al., 2012
Salmoniformes	*Oncorhynchus mykiss*	Rainbow trout	ARα	*arα*	**ARβ1**	***ar2a***	NCBI	BAA32784.1	Takeo & Yamashita, 1999
			ARβ	*arβ*	**ARβ2**	***ar2b***	NCBI	BAA32785.1	Takeo & Yamashita, 1999
Gadiformes	*Gadus morhua*	Atlantic cod	AR	*ar*	**ARα**	***ar1***	NCBI	ACN97554.1	Almeida et al., 2009
Beloniformes	*Oryzias latipes*	Medaka	ARα	*arα*	Same	***ar1***	NCBI	BAI22839.1	Ikeuchi, 2007
			ARβ	*arβ*	Same	***ar2***	NCBI	BAI58984.1	Ogino et al., 2009
Cichliformes	*Astatotilapia burtoni*	Burton's mouthbrooder	AR	*ar*	**ARα**	***ar1***	NCBI	AAD25074.2	White & Fernald, 2005
			ARβ	*arβ*	Same	***ar2***	NCBI	AAL92878.2	Vagell et al., 2002

‡Indicates proteins and genes that were excluded from phylogenetic analysis because only partial sequences were available.

Table S1 (continued)

			Current Nomenclature		Proposed Nomenclature				
Order	**Species**	**Common Name**	**Protein**	**Gene**	**Protein**	**Gene**	**Database**	**Order**	**Species**
Cichliformes	*Oreochromis niloticus*	Nile tilapia	ARα	*arα*	Same	***ar1***	NCBI	BAB20081.1	Ikeuchi et al., 2000
			ARβ	*arβ*	Same	***ar2***	NCBI	BAB20082.1	Ikeuchi et al., 2000
Ovalentaria*	*Amphiprion percula*	Orange clownfish	AR	*ar*	**ARβ**	***ar2***	UniProt	A0A3P8SEK0	Lehmann et al. 2019
Perciformes	*Dicentrarchus labrax*	European seabass	AR	*ar*	**ARβ**	***ar2***	NCBI	AAT76433.1	Blázquez & Piferrer, 2005
Gasterosteiformes	*Gasterosteus aculeatus*	Three-spined stickleback	ARα	*arα*	Same	***ar1***	NCBI	BAI68266.1	Matsuo et al., 2010
			ARβ1	*arβ1*	Same	***ar2a***	NCBI	AAO83573.1	Olsson et al., 2005
			ARβ2‡	*arβ2*‡	N/A	N/A	NCBI	AAO83572.1	Olsson et al., 2005
Pleuronectiformes	*Paralichthys olivaceus*	Olive flounder	AR	ar	**ARα1**	***ar1a***	NCBI	AGV29985.1	Zou et al., 2018
			ARα	arα	**ARα2**	***ar1b***	NCBI	AYN44208.1	Zou et al., 2018
Tetraodontiformes	*Tetraodon nigroviridis*	Spotted green pufferfish	AR	*ar*	**ARβ**	***ar2***	UniProt	H3D2P2	Jaillon et al., 2004
Anura	*Xenopus laevis*	African clawed frog	AR	*ar*	Same	Same	NCBI	XP_041428573.1	Session et al., 2016
Galliformes	*Gallus gallus*	Red junglefowl	AR	*ar*	Same	Same	NCBI	BAE80463.1	Katoh et al., 2006
Rodentia	*Mus musculus*	House mouse	AR	*ar*	Same	Same	NCBI	NP_038504.1	El Kharraz et al. 2022
Primates	*Homo sapiens*	Human	AR	*ar*	Same	Same	NCBI	P10275.3	Lubahn et al., 1988

**Amphiprion percula* is classified in the subseries Ovalentaria in the clade Percomorpha.
‡Indicates proteins and genes that were excluded from phylogenetic analysis because only partial sequences were available.

Orders, species, common names, nomenclature, databases, accession numbers, and references for androgen receptor protein sequences from 22 representative fish species [18 teleost fishes (Infraclass: Teleostii), 1 non-teleost ray-finned fish (Infraclass: Holostei), 2 cartilaginous fishes (Class: Chondrichthyes), and 1 jawless fish (Class: Hyperoartia)] and 4 outgroup species (*Xenopus laevis, Gallus gallus, Mus musculus,* and *Homo sapiens*) that were selected for phylogenetic analysis (Fig. 2). The "Current Nomenclature" columns contain the protein and gene names currently used for each sequence, whereas the "Proposed Nomenclature" columns contain the protein and gene names recommended for each sequence based on the results of our analysis. Protein and gene names that differ between the "Current Nomenclature" and "Proposed Nomenclature" columns are shown in **bold**. *Abbreviations: ar, androgen receptor gene; AR, androgen receptor protein; ar1, androgen receptor 1 gene; ar1a, androgen receptor 1a gene; ar1b, androgen receptor 1b gene; ar2, androgen receptor 2 gene; ar2a, androgen receptor 2a gene; ar2b, androgen receptor 2b gene; arα, androgen receptor alpha gene; ARα, androgen receptor alpha protein; ARα1, androgen receptor alpha 1 protein; ARα2, androgen receptor alpha 2 protein; arβ, androgen receptor beta gene; ARβ, androgen receptor beta protein; arβ1, androgen receptor beta 1 gene; ARβ1, androgen receptor beta 1 protein; arβ2, androgen receptor beta 2 gene; ARβ2, androgen receptor beta 2 protein; NCBI, National Center for Biotechnology Information; VGP, Vertebrate Genomes Project.*

Table S2. Protein sequences of estrogen receptors used for phylogenetic analysis.

			Current Nomenclature		Proposed Nomenclature				
Order	**Species**	**Common Name**	**Protein**	**Gene**	**Protein**	**Gene**	**Database**	**Accession Number**	**References**
Petromyzontiformes	*Petromyzon marinus*	Sea lamprey	ERα	*esr1*	**ERβ**	***esr2***	NCBI	APA19936.1	Ren et al., 2015
			ERβ‡	*esr2*‡	N/A	N/A	UniProt	S4RW02	N/A
Rajiformes	*Leucoraja erinacea*	Little skate	ERα	*esr1*	Same	Same	NCBI	QBF55475.1	Filowitz et al., 2018
			ERβ	*esr2*	Same	Same	NCBI	QBF55476.1	Filowitz et al., 2018
Chimaeriformes	*Callorhinchus milli*	Australian ghostshark	ERα	*esr1*	Same	Same	NCBI	BAX07663.1	Narita et al., 2015
			ERβ	*esr2*	Same	Same	NCBI	BAX07664.1	Narita et al., 2015
Semionotiformes	*Lepisosteus oculatus*	Spotted gar	ERα‡	*esr1*‡	N/A	N/A	UniProt	W5NHJ0	Di Palma et al, 2011
			ERβ	*esr2*	Same	Same	NCBI	XP_006632252.1	Di Palma et al., 2011
Anguilliformes	*Anguilla japonica*	Japanese eel	ER1	*esr1*	**ERα**	Same	NCBI	BAT68973.1	Tohyama et al., 2015
			ER2a	*esr2a*	**ERβ1**	Same	NCBI	BAT68974.1	Tohyama et al., 2015
			ER2b†	*esr2b*†	N/A	N/A	N/A	N/A	N/A
Cypriniformes	*Danio rerio*	Zebrafish	ER	*esr*	**ERα**	***esr1***	NCBI	BAB16893.1	Morimoto et al., 2000
			ERβ1	*esr2a*	**ERβ2**	***esr2b***	NCBI	CAC93848.1	Menuet et al., 2002
			ER2a	*esr2a*	**ERβ1**	Same	NCBI	AAI65404.1	Strausberg et al., 2002
Cypriniformes	*Carassius auratus*	Goldfish	ERα	*esr1*	Same	Same	NCBI	AAL12298.1	Choi & Habibi, 2003
			ERβ	*esr2*	**ERβ1**	***esr2a***	NCBI	AAD26921.1	Tchoudakova et al., 1999
			ERβ2	*esr2b*	Same	Same	NCBI	AAF35170.1	Ma et al., 2000
Cyprinodontiformes	*Fundulus heteroclitus*	Atlantic killifish	ERα	*esr1*	Same	Same	NCBI	ADQ53855.2	Cotter & Callard, 2014
			ERβa	*esr2a*	**ERβ1**	Same	NCBI	AAU44352.1	Greytak & Callard, 2007
			ERβb	*esr2b*	**ERβ2**	Same	NCBI	AAU44353.1	Greytak & Callard, 2007
Cyprinodontiformes	*Poecilia mexicana*	Shortfin molly	ERα	*esr1*	Same	Same	NCBI	ANN14186.1	Zhu et al., 2016
			ERβ1	*esr2a*	Same	Same	NCBI	ANN14189.1	Zhu et al., 2016
			ERβ2†	*esr2b*†	N/A	N/A	N/A	N/A	N/A
Cyprinodontiformes	*Gambusia affinis*	Western mosquitofish	ERα	*esr1*	Same	Same	NCBI	BAF76770.1	Katsu et al., 2007
			ERβ1	*esr2a*	Same	Same	NCBI	BAF76771.1	Katsu et al., 2007
			ERβ2	*esr2b*	Same	Same	NCBI	BAF76772.1	Katsu et al., 2007
Characiformes	*Astyanax mexicanus*	Mexican tetra	ER	*esr*	**ERα**	***esr1***	NCBI	XP_007253959.3	McGaugh et al., 2014
			ER2a	*esr2a*	**ERβ1**	Same	NCBI	XP_049337012.1	N/A
			ER2b	*esr2b*	**ERβ2**	Same	NCBI	XP_022519757.1	McGaugh et al., 2014

†Indicates proteins and genes for which no sequence is available via NCBI and UniProt.

‡Indicates proteins and genes that were excluded from phylogenetic analysis because only partial sequences were available.

Table S2 (continued)

			Current Nomenclature		Proposed Nomenclature				
Order	**Species**	**Common Name**	**Protein**	**Gene**	**Protein**	**Gene**	**Database**	**Accession Number**	**References**
Siluriformes	*Ictalurus punctatus*	Channel catfish	ERα	*esr1*	Same	Same	NCBI	AAG24543.1	Patiño et al., 2000
			ERβ	*esr2*	**ERβ2**	***esr2b***	NCBI	AAF63157.1	Xia et al., 2000
Salmoniformes	*Oncorhynchus mykiss*	Rainbow trout	ER	*esr*	**ERα**	***esr1***	NCBI	CAB45140.1	Pakdel et al., 1990
			ERβ	*esr2*	**ERβ1**	***esr2a***	NCBI	CAC06714.1	Haugg et al., 2000
Gadiformes	*Gadus morhua*	Atlantic cod	ER1‡	*esr1*‡	N/A	N/A	NCBI	AGE12621.1	Nagasawa et al., 2012
			ER2a‡	*esr2a*‡	N/A	N/A	NCBI	AGE12622.1	Nagasawa et al., 2012
			ER2b	*esr2b*	**ERβ2**	Same	UniProt	A0A8C5C459	N/A
Beloniformes	*Oryzias latipes*	Medaka	ER	*esr*	**ERα**	***esr1***	NCBI	BAA25900.1	Okada et al., 1994
			ERβ	*esr2*	**ERβ1**	***esr2a***	NCBI	BAB79705.1	Nobukawa & Nakai, 2001
Cichliformes	*Astatotilapia burtoni*	Burton's mouthbrooder	ERα	*esr1*	Same	Same	NCBI	AAR82891.1	Hoke et al., 2003
			ERβ	*esr2*	**ERβ2**	***esr2b***	NCBI	ABI18966.1	Burmeister et al., 2006
			ERβb‡	*esr2b*‡	N/A	N/A	NCBI	ABI18967.1	Burmeister et al., 2006
Cichliformes	*Oreochromis niloticus*	Nile tilapia	ER1	*esr1*	**ERα**	Same	NCBI	AAD00245.1	Chang et al., 1999
			ER2	*esr2*	**ERβ1**	***esr2a***	NCBI	AAD00246.1	Chang et al., 1999
			ERβ2	*esr2b*	Same	Same	NCBI	ABE73151.1	Wang et al., 2005
Ovalentaria*	*Amphiprion percula*	Orange clownfish	ER	*esr*	**ERα**	***esr1***	UniProt	A0A3P8TEM8	Lehmann et al. 2019
			ER2a	*esr2a*	**ERβ1**	Same	UniProt	A0A3P8SB84	Lehmann et al. 2019
			ER2b	*esr2b*	**ERβ2**	Same	UniProt	A0A3P8RVV0	Lehmann et al. 2019
Perciformes	*Dicentrarchus labrax*	European seabass	ERα‡	*esr1*‡	N/A	N/A	NCBI	AJ505009	Halm et al., 2004
			ERβ1‡	*esr2a*‡	N/A	N/A	NCBI	AJ489523	Halm et al., 2004
			ERβ2‡	*esr2b*‡	N/A	N/A	NCBI	AJ489524	Halm et al., 2004
Gasterosteiformes	*Gasterosteus aculeatus*	Three-spined stickleback	ERα	*esr1*	Same	Same	NCBI	BAF96738.1	Katsu et al., 2007
			ER2a	*esr2a*	**ERβ1**	Same	UniProt	G3NXA2	Lindblad-Toh et al., 2006a
			ER2b	*esr2b*	**ERβ2**	Same	NCBI	BAR64353.1	Tohyama et al., 2014
Pleuronectiformes	*Paralichthys olivaceus*	Olive flounder	ERα	*esr1*	Same	Same	NCBI	BAB85622.1	Kitano et al., 2001
			ERβ	*esr2*	**ERβ1**	***esr2a***	NCBI	BAB85623.1	Kitano et al., 2001
Tetraodontiformes	*Tetraodon nigroviridis*	Spotted green pufferfish	ERα‡	*esr1*‡	N/A	N/A	UniProt	H3CZM7	Jaillon et al., 2004

**Amphiprion percula* is classified in the subseries Ovalentaria in the clade Percomorpha.

†Indicates proteins and genes for which no sequence is available via NCBI and UniProt.

‡Indicates proteins and genes that were excluded from phylogenetic analysis because only partial sequences were available.

Table S2 (continued)

			Current Nomenclature		Proposed Nomenclature				
Order	**Species**	**Common Name**	**Protein**	**Gene**	**Protein**	**Gene**	**Database**	**Accession Number**	**References**
Tetraodontiformes	*Tetraodon nigroviridis*	Spotted green pufferfish	ER2a	*esr2a*	**ERβ1**	Same	UniProt	H3CBL4	Jaillon et al., 2004
			ER2b	*esr2b*	**ERβ2**	Same	UniProt	H3D4B2	Jaillon et al., 2004
Anura	*Xenopus laevis*	African clawed frog	ERα1	*esr1.L*	**ERα**	***esr1***	NCBI	AAQ84782.1	Wu et al., 2003
			ERα2	*esr1.S*	**ERα**	***esr1***	NCBI	AAQ84783.1	Wu et al., 2003
			ERβ1	*esr2.L*	**ERβ**	***esr2***	NCBI	BAG31996.1	Iwabuchi et al., 2008
			ERβ2	*esr2.L*	**ERβ**	***esr2***	NCBI	BAG31997.1	Iwabuchi et al., 2008

[‡]Indicates proteins and genes that were excluded from phylogenetic analysis because only partial sequences were available.
[b]Indicates proposed nomenclature for proteins and genes that were excluded from phylogenetic analysis.

Orders, species, common names, nomenclature, databases, accession numbers, and references for estrogen receptor protein sequences from 22 representative fish species [18 teleost fishes (Infraclass: Teleostii), 1 non-teleost ray-finned fish (Infraclass: Holostei), 2 cartilaginous fishes (Class: Chondrichthyes), and 1 jawless fish (Class: Hyperoartia)] and 1 outgroup species (*Xenopus laevis*) that were selected for phylogenetic analysis (Fig. 3). The "Current Nomenclature" columns contain the protein and gene names currently used for each sequence, whereas the "Proposed Nomenclature" columns contain the protein and gene names recommended for each sequence based on the results of our analysis. Protein and gene names that differ between the "Current Nomenclature" and "Proposed Nomenclature" columns are shown in **bold**. *Abbreviations: ER, estrogen receptor protein; ER1, estrogen receptor 1 protein; ER2a, estrogen receptor 2a protein; ER2b, estrogen receptor 2b protein; ERα, estrogen receptor alpha protein; ERα1, estrogen receptor alpha 1 protein; ERα2, estrogen receptor alpha 2 protein; ERβ, estrogen receptor beta protein; ERβ1, estrogen receptor beta 1 protein; ERβ2, estrogen receptor beta 2 protein; esr, estrogen receptor gene; esr1, estrogen receptor 1 gene; esr2, estrogen receptor 2 gene; esr2a, estrogen receptor 2a gene; esr2b, estrogen receptor 2b gene; NCBI, National Center for Biotechnology Information; VGP, Vertebrate Genomes Project.*

Table S3. Protein sequences of progesterone receptors used for phylogenetic analysis.

			Current Nomenclature		Proposed Nomenclature				
Order	**Species**	**Common Name**	**Protein**	**Gene**	**Protein**	**Gene**	**Database**	**Accession Number**	**References**
Petromyzontiformes	*Petromyzon marinus*	Sea lamprey	PR	*pgr*	Same	Same	NCBI	XP_032812358.1	VGP, 2020
Rajiformes	*Leucoraja erinacea*	Little skate	PR‡	*pgr*‡	N/A	N/A	NCBI	ABD46747.1	Bridgham et al., 2006
Chimaeriformes	*Callorhinchus milli*	Australian ghostshark	PR‡	*pgr*‡	N/A	N/A	NCBI	AFP05047.1	Venkatesh et al., 2014
Semionotiformes	*Lepisosteus oculatus*	Spotted gar	PR	*pgr*	Same	Same	UniProt	W5ME76	Di Palma et al, 2011
Anguilliformes	*Anguilla japonica*	Japanese eel	PR	*pgr*	Same	Same	NCBI	BAA89539.1	Todo et al., 2000
Cypriniformes	*Danio rerio*	Zebrafish	PR	*pgr*	Same	Same	NCBI	NP_001159807.1	Baker et al., 2021
Cypriniformes	*Carassius auratus*	Goldfish	PR1	*pgr1*	**PRα**	Same	NCBI	BAO48148.1	Li et al., 2014b
			PR2	*pgr2*	**PRβ**	Same	NCBI	BAP76081.2	Li et al., 2014a
Cyprinodontiformes	*Fundulus heteroclitus*	Atlantic killifish	PR	*pgr*	Same	Same	UniProt	A0A3Q2TRX5	N/A
Cyprinodontiformes	*Poecilia mexicana*	Shortfin molly	PR	*pgr*	Same	Same	NCBI	XP_014844614.1	N/A
Cyprinodontiformes	*Gambusia affinis*	Western mosquitofish	PR	*pgr*	Same	Same	NCBI	XP_043976375.1	Shao et al., 2020
Characiformes	*Astyanax mexicanus*	Mexican tetra	PR	*pgr*	Same	Same	NCBI	XP_022535482.2	McGaugh et al., 2014
Siluriformes	*Ictalurus punctatus*	Channel catfish	PR	*pgr*	Same	Same	NCBI	XP_017320841.2	Liu et al., 2016
Salmoniformes	*Oncorhynchus mykiss*	Rainbow trout	PR‡	*pgr*‡	N/A	N/A	NCBI	XP_036825993.1	N/A
Gadiformes	*Gadus morhua*	Atlantic cod	PR	*pgr*	Same	Same	NCBI	ACF21816.1	Chen et al., 2012
Beloniformes	*Oryzias latipes*	Medaka	PR	*pgr*	Same	Same	NCBI	NP_001165515.1	Kasahara et al., 2007
Cichliformes	*Astatotilapia burtoni*	Burton's mouthbrooder	PR	*pgr*	Same	Same	NCBI	ACM51148.1	Munchrath & Hofmann, 2009
Cichliformes	*Oreochromis niloticus*	Nile tilapia	PR	*pgr*	Same	Same	NCBI	AIE56465.1	Liu et al., 2014
Ovalentaria*	*Amphiprion percula*	Orange clownfish	PR	*pgr*	Same	Same	UniProt	A0A3P8T015	Lehmann et al. 2019
Perciformes	*Dicentrarchus labrax*	European seabass	PR	*pgr*	Same	Same	UniProt	A0A8C4P0M0	N/A
Gasterosteiformes	*Gasterosteus aculeatus*	Three-spined stickleback	PR	*pgr*	Same	Same	NCBI	XP_040031607.1	Lindblad-Toh et al., 2006e
Pleuronectiformes	*Paralichthys olivaceus*	Olive flounder	PR	*pgr*	Same	Same	NCBI	XP_019943490.1	Lowe & Eddy, 1997
Tetraodontiformes	*Tetraodon nigroviridis*	Spotted green pufferfish	PR‡	*pgr*‡	N/A	N/A	UniProt	H3C2L5	Jaillon et al., 2004
Anura	*Xenopus laevis*	African clawed frog	PR	*pgr*	Same	Same	NCBI	XP_018105830.1	Session et al., 2016
Galliformes	*Gallus gallus*	Red junglefowl	PR	*pgr*	Same	Same	NCBI	NP_990593.1	Jeltsch et al., 1986
Rodentia	*Mus musculus*	House mouse	PR	*pgr*	Same	Same	NCBI	NP_032855.2	Shyamala et al., 1990
Primates	*Homo sapiens*	Human	PR	*pgr*	Same	Same	NCBI	AAA60081.1	Misrahi et al., 1987

*****_Amphiprion percula_ is classified in the subseries Ovalentaria in the clade Percomorpha.
‡Indicates proteins and genes that were excluded from phylogenetic analysis because only partial sequences were available.

Table S3 (continued)

Orders, species, common names, nomenclature, databases, accession numbers, and references for progesterone receptor protein sequences from 22 representative fish species [18 teleost fishes (Infraclass: Teleostii), 1 non-teleost ray-finned fish (Infraclass: Holostei), 2 cartilaginous fishes (Class: Chondrichthyes), and 1 jawless fish (Class: Hyperoartia)] and 4 outgroup species (*Xenopus laevis, Gallus gallus, Mus musculus,* and *Homo sapiens*) that were selected for phylogenetic analysis (Fig. 4). The "Current Nomenclature" columns contain the protein and gene names currently used for each sequence, whereas the "Proposed Nomenclature" columns contain the protein and gene names recommended for each sequence based on the results of our analysis. Protein and gene names that differ between the "Current Nomenclature" and "Proposed Nomenclature" columns are shown in **bold**. *Abbreviations: NCBI, National Center for Biotechnology Information; pgr, progesterone receptor gene; pgr1, progesterone receptor 1 gene; pgr2, progesterone receptor 2 gene; PR, progesterone receptor protein; PR1, progesterone receptor 1 protein; PR2, progesterone receptor 2 protein; PRα, progesterone receptor alpha protein; PRβ, progesterone receptor beta protein; VGP, Vertebrate Genomes Project.*

Table S4. Protein sequences of glucocorticoid receptors used for phylogenetic analysis.

			Current Nomenclature		Proposed Nomenclature				
Order	**Species**	**Common Name**	**Protein**	**Gene**	**Protein**	**Gene**	**Database**	**Accession Number**	**References**
Petromyzontiformes	*Petromyzon marinus*	Sea lamprey	GR†	*nr3c1*†	N/A	N/A	N/A	N/A	N/A
Rajiformes	*Leucoraja erinacea*	Little skate	GR‡	*nr3c1*‡	N/A	N/A	NCBI	ABD46744.1	Bridgham et al., 2006
Chimaeriformes	*Callorhinchus milli*	Australian ghostshark	GR‡	*nr3c1*‡	N/A	N/A	NCBI	XP_042195980.1	Venkatesh et al., 2006
Semionotiformes	*Lepisosteus oculatus*	Spotted gar	GR	*nr3c1*	Same	Same	NCBI	XP_015204941.1	Di Palma et al, 2011
Anguilliformes	*Anguilla japonica*	Japanese eel	GR	*nr3c1*	**GRα**	***nr3c1a***	NCBI	BAH70337.1	Todo et al., 2009
Cypriniformes	*Danio rerio*	Zebrafish	GR	*nr3c1*	**GRβ**	***nr3c1b***	NCBI	NP_001018547.2	Dinarello et al., 2022
Cypriniformes	*Carassius auratus*	Goldfish	GR1‡	*gr1*‡	N/A	N/A	NCBI	ADT91059.1	Chasiotis & Kelly, 2011
			GR2‡	*gr2*‡	N/A	N/A	NCBI	ADT91060.1	Chasiotis & Kelly, 2011
Cyprinodontiformes	*Fundulus heteroclitus*	Atlantic killifish	GR	*nr3c1*	**GRβ**	***nr3c1b***	NCBI	JAR86104.1	Gilbert, 2015
Cyprinodontiformes	*Poecilia mexicana*	Shortfin molly	GR	*nr3c1*	**GRα**	***nr3c1a***	NCBI	XP_014844992.1	N/A
Cyprinodontiformes	*Gambusia affinis*	Western mosquitofish	GR1‡	*gr1*‡	N/A	N/A	NCBI	QED87743.1	Lema, 2019a
			GR2‡	*gr2*‡	N/A	N/A	NCBI	QED87744.1	Lema, 2019b
Characiformes	*Astyanax mexicanus*	Mexican tetra	GR	*nr3c1*	**GRα**	***nr3c1a***	NCBI	XP_015460745.3	McGaugh et al., 2014
Siluriformes	*Ictalurus punctatus*	Channel catfish	GR1	*gr1*	**GRα**	***nr3c1a***	NCBI	AUB30298.1	Small & Quiniou, 2018
			GR2	*gr2*	**GRβ**	***nr3c1b***	NCBI	AUB30299.1	Small & Quiniou, 2018
Salmoniformes	*Oncorhynchus mykiss*	Rainbow trout	GR	*nr3c1*	**GRα**	***nr3c1a***	NCBI	NP_001118202.1	Alderman et al., 2012
			GR2	*gr2*	**GRβ**	***nr3c1b***	NCBI	AAR87479.1	Bury et al., 2003
Gadiformes	*Gadus morhua*	Atlantic cod	GR	*nr3c1*	**GRα**	***nr3c1a***	NCBI	XP_030216363.1	N/A
Beloniformes	*Oryzias latipes*	Medaka	GR	*nr3c1*	**GRβ**	***nr3c1b***	NCBI	BAH59524.1	Ikeuchi & Goto, 2006
Cichliformes	*Astatotilapia burtoni*	Burton's mouthbrooder	GR	*nr3c1*	**GRβ**	***nr3c1b***	NCBI	AAM27887.1	Greenwood et al., 2003
			GR2	*gr2*	**GRα**	***nr3c1a***	NCBI	AAM27888.1	Greenwood et al., 2003
			GR2b‡	*gr2b*‡	N/A	N/A	NCBI	AAM27889.1	Greenwood et al., 2003
Cichliformes	*Oreochromis niloticus*	Nile tilapia	GR	*nr3c1*	**GRα**	***nr3c1a***	UniProt	I3JP68	Di Palma et al., 2012
Ovalentaria*	*Amphiprion percula*	Orange clownfish	GR	*nr3c1*	**GRα**	***nr3c1a***	UniProt	A0A3P8TK42	Lehmann et al. 2019
Perciformes	*Dicentrarchus labrax*	European seabass	GR	*nr3c1*	**GRα**	***nr3c1a***	NCBI	AAS48459.1	Terova et al., 2005
Gasterosteiformes	*Gasterosteus aculeatus*	Three-spined stickleback	GR	*nr3c1*	**GRβ**	***nr3c1b***	NCBI	XP_040028641.1	Lindblad-Toh et al., 2006d
Pleuronectiformes	*Paralichthys olivaceus*	Olive flounder	GR	*nr3c1*	**GRα**	***nr3c1a***	NCBI	BAA25997.1	Tokuda, 1998

**Amphiprion percula* is classified in the subseries Ovalentaria in the clade Percomorpha.
†Indicates proteins and genes for which no sequence is available via NCBI and UniProt

‡Indicates proteins and genes that were excluded from phylogenetic analysis because only partial sequences were available.

Table S4 (continued)

			Current Nomenclature		Proposed Nomenclature				
Order	**Species**	**Common Name**	**Protein**	**Gene**	**Protein**	**Gene**	**Database**	**Order**	**Species**
Tetraodontiformes	*Tetraodon nigroviridis*	Spotted green pufferfish	GR	*nr3c1*	**GRβ**	***nr3c1b***	UniProt	H3CU66	Jaillon et al., 2004
Anura	*Xenopus laevis*	African clawed frog	GR	*nr3c1*	Same	Same	NCBI	NP_001081531.1	Klein et al., 2002
Galliformes	*Gallus gallus*	Red junglefowl	GR	*nr3c1*	Same	Same	NCBI	NP_001032915.1	Kwok et al., 2007
Rodentia	*Mus musculus*	House mouse	GR	*nr3c1*	Same	Same	NCBI	NP_001348138.1	Strähle et al. 1992
Primates	*Homo sapiens*	Human	GR	*nr3c1*	Same	Same	NCBI	CAJ65924.1	Turner et al., 2007

Orders, species, common names, nomenclature, databases, accession numbers, and references for glucocorticoid receptor protein sequences from 22 representative fish species [18 teleost fishes (Infraclass: Teleostii), 1 non-teleost ray-finned fish (Infraclass: Holostei), 2 cartilaginous fishes (Class: Chondrichthyes), and 1 jawless fish (Class: Hyperoartia)] and 4 outgroup species (*Xenopus laevis, Gallus gallus, Mus musculus,* and *Homo sapiens*) that were selected for phylogenetic analysis (Fig. 5). The "Current Nomenclature" columns contain the protein and gene names currently used for each sequence, whereas the "Proposed Nomenclature" columns contain the protein and gene names recommended for each sequence based on the results of our analysis. Protein and gene names that differ between the "Current Nomenclature" and "Proposed Nomenclature" columns are shown in **bold**. *Abbreviations: GR, glucocorticoid receptor protein; gr1, glucocorticoid receptor isoform 1 gene; GR1, glucocorticoid receptor isoform 1 protein; gr2, glucocorticoid receptor isoform 2 gene; GR2, glucocorticoid receptor isoform 2 protein; GRα, glucocorticoid receptor alpha protein; GRβ, glucocorticoid receptor beta protein; nr3c1, nuclear receptor subfamily 3 group C member 1 gene; nr3c1a, nuclear receptor subfamily 3 group C member 1a gene; nr3c1b, nuclear receptor subfamily 3 group C member 1b gene; NCBI, National Center for Biotechnology Information.*

Table S5. Protein sequences of mineralocorticoid receptors used for phylogenetic analysis.

			Current Nomenclature		Proposed Nomenclature				
Order	**Species**	**Common Name**	**Protein**	**Gene**	**Protein**	**Gene**	**Database**	**Accession Number**	**References**
Petromyzontiformes	*Petromyzon marinus*	Sea lamprey	MR‡	*nr3c2*‡	N/A	N/A	NCBI	XP_032811370.1	VGP, 2020
Rajiformes	*Leucoraja erinacea*	Little skate	MR‡	*nr3c2*‡	N/A	N/A	NCBI	ABD46745.1	Bridgham et al., 2006
Chimaeriformes	*Callorhinchus milli*	Australian ghostshark	MR‡	*nr3c2*‡	N/A	N/A	NCBI	AFO96697.1	Venkatesh et al., 2014
Semionotiformes	*Lepisosteus oculatus*	Spotted gar	MR	*nr3c2*	Same	Same	NCBI	XP_015200148.1	N/A
Anguilliformes	*Anguilla japonica*	Japanese eel	MR†	*nr3c2*†	N/A	N/A	N/A	N/A	N/A
Cypriniformes	*Danio rerio*	Zebrafish	MR	*nr3c2*	Same	Same	NCBI	ABS00395.1	Alsop & Vijayan, 2008
Cypriniformes	*Carassius auratus*	Goldfish	MR‡	*nr3c2*‡	N/A	N/A	NCBI	ADT91061.1	Chasiotis & Kelly, 2011
Cyprinodontiformes	*Fundulus heteroclitus*	Atlantic killifish	MR	*nr3c2*	Same	Same	NCBI	JAR75477.1	Gilbert, 2015
Cyprinodontiformes	*Poecilia mexicana*	Shortfin molly	MR	*nr3c2*	Same	Same	NCBI	XP_014825197.1	N/A
Cyprinodontiformes	*Gambusia affinis*	Western mosquitofish	MR	*nr3c2*	Same	Same	NCBI	XP_043970615.1	Shao et al., 2020
Characiformes	*Astyanax mexicanus*	Mexican tetra	MR	*nr3c2*	Same	Same	NCBI	KAG9275703.1	Imarazene et al., 2021
Siluriformes	*Ictalurus punctatus*	Channel catfish	MR	*nr3c2*	Same	Same	NCBI	XP_017319489.1	Liu et al., 2016
Salmoniformes	*Oncorhynchus mykiss*	Rainbow trout	MR	*nr3c2*	Same	Same	NCBI	NP_001117955.1	Pasquier et al., 2016
Gadiformes	*Gadus morhua*	Atlantic cod	MR‡	*nr3c2*‡	N/A	N/A	NCBI	AFH89813.1	molLanes et al., 2012
Beloniformes	*Oryzias latipes*	Medaka	MR	*nr3c2*	Same	Same	NCBI	BAH59525.1	Ikeuchi, 2006
Cichliformes	*Astatotilapia burtoni*	Burton's mouthbrooder	MR	*nr3c2*	Same	Same	NCBI	AAM27890.1	Greenwood et al., 2003
Cichliformes	*Oreochromis niloticus*	Nile tilapia	MR	*nr3c2*	Same	Same	NCBI	XP_025763414.1	N/A
Ovalentaria*	*Amphiprion percula*	Orange clownfish	MR†	*nr3c2*†	N/A	N/A	N/A	N/A	N/A
Perciformes	*Dicentrarchus labrax*	European seabass	MR‡	*nr3c2*‡	N/A	N/A	NCBI	AEG79733.1	Kollias et al., 2011
Gasterosteiformes	*Gasterosteus aculeatus*	Three-spined stickleback	MR	*nr3c2*	Same	Same	NCBI	XP_040042709.1	Nath et al., 2021
Pleuronectiformes	*Paralichthys olivaceus*	Olive flounder	MR	*nr3c2*	Same	Same	NCBI	XP_019956853.1	Lowe & Eddy, 1997
Tetraodontiformes	*Tetraodon nigroviridis*	Spotted green pufferfish	MR†	*nr3c2*†	N/A	N/A	N/A	N/A	N/A
Anura	*Xenopus laevis*	African clawed frog	MR	*nr3c2*	Same	Same	NCBI	NP_001084074.1	Klein et al., 2002
Galliformes	*Gallus gallus*	Red junglefowl	MR	*nr3c2*	Same	Same	NCBI	NP_001152817.2	Proszkowiec-Weglarz and Porter, 2010
Rodentia	*Mus musculus*	House mouse	MR	*nr3c2*	Same	Same	NCBI	NP_001077375.1	Terajima et al., 1994
Primates	*Homo sapiens*	Human	MR	*nr3c2*	Same	Same	NCBI	AAA59571.1	Arriza et al., 1987

**Amphiprion percula* is classified in the subseries Ovalentaria in the clade Percomorpha.
†Indicates proteins and genes for which no sequence is available via NCBI and UniProt
‡Indicates proteins and genes that were excluded from phylogenetic analysis because only partial sequences were available.

Table S5 (continued)

Orders, species, common names, nomenclature, databases, accession numbers, and references for mineralocorticoid receptor protein sequences from 22 representative fish species [18 teleost fishes (Infraclass: Teleostii), 1 non-teleost ray-finned fish (Infraclass: Holostei), 2 cartilaginous fishes (Class: Chondrichthyes), and 1 jawless fish (Class: Hyperoartia)] and 4 outgroup species (*Xenopus laevis, Gallus gallus, Mus musculus,* and *Homo sapiens*) that were selected for phylogenetic analysis (Fig. 6). The "Current Nomenclature" columns contain the protein and gene names currently used for each sequence, whereas the "Proposed Nomenclature" columns contain the protein and gene names recommended for each sequence based on the results of our analysis. Protein and gene names that differ between the "Current Nomenclature" and "Proposed Nomenclature" columns are shown in **bold**. *Abbreviations: MR, mineralocorticoid receptor protein; nr3c2, nuclear receptor subfamily 3 group C member 2 gene; NCBI, National Center for Biotechnology Information; VGP, Vertebrate Genomes Project.*

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