

Supplemental Table 1. GenBank numbers for species included in the analyses with vouchers for all new sequences.

Taxon	Molecular Species	Voucher	tRNA-Val-16S	16Sar-br	COI	28S	Histone H3	TMO-4c4	Glyt	zic1
Cirrhitidae										
<i>Cirrhitus</i> (root)	<i>Cirrhitus rivulatus</i>	SIO 00-154	AY538954,AY539571	AY539059	Unavailable	AY539163	AY539268	AY539467	MF966395	MF991395
Serranidae										
<i>Diplectrum</i>	<i>Diplectrum formosum</i>	no new sequences	FJ548768	AY539048	AY662750	AY539152	AY539257	AY539456	KX230255	KX230363
Anthiidae										
<i>Pseudanthias</i>	<i>Pseudanthias squamipinnis</i>	KUIT 6932/SAIAB 77366	FJ548776	EF120855	JF494294	EF120945	EF120896	AY949308	Unavailable	MF991403
<i>Zalanthias</i>	<i>Zalanthias kelloggi</i>	H. Endo pers. col.	AY538947,AY539564	AY539052	MF991323	AY539156	AY539261	AY539460	Unavailable	Unavailable
Epinephelidae										
<i>Diploprion</i>	<i>Diploprion bifasciatum</i>	KUI 41389	EF120793	AY949329	MF991306	EF120928	AY949475	AY949214	MF966397	MF991397
Niphonidae										
<i>Niphon</i>	<i>Niphon spinosus</i>	no new sequences	EF120786	AY947575	EF143386	EF120921	AY949596	AY949210	KF139813	KX230373
Percidae										
<i>Perca</i>	<i>Perca flavescens</i>	no new sequences	AY538950,AY539567	AY539055	AY662755	AY539159	AY539264	AY539463	JX188741	KX230374
Bovichtidae										
<i>Bovichtus</i>	<i>Bovichtus variegatus</i>	G. Lecointre pers. col.	MF991411	MF991327	MF991303	MF991341	MF991360	MF991377	MF966393	JN186801
Bembropidae										
<i>Bembrops</i>	<i>Bembrops heterurus</i>	R. Hanel pers. col.	DQ533159	DQ532842	KX230167	DQ532997	DQ533339	MF991376	KX230250	KX230360
Trachinidae										
<i>Trachinus</i>	<i>Trachinus draco</i>	no new sequences	AY538963,AY539580	AY539068	KJ128641	AY539172	AY539277	AY539476	KP965937	KP966060
COTTOIDEI										
Psychrolutidae										
<i>Icelinus</i>	<i>Icelinus filamentosus</i>	SIO 97-184	AY538918,AY539535	AY539023	EU403067	AY539127	AY539232	AY539433	KX230263	MF991399
ZOARCOIDEI										
Bathymasteridae										
<i>Bathymaster</i>	<i>Bathymaster signatus</i>	no new sequences	AY538956,AY539573	AY539061	HQ712316	AY539165	AY539270	AY539469	KF139689	KF140497
CONGIPODOIDEI										
Congiopodidae										
<i>Congiopodus</i>	<i>Congiopodus peruvianus</i>	A. Gosztonyi pers. col.	AY538893,AY539510	AY538998	MF991305	AY539103	AY539207	MF991380	MF966396	MF991396
<i>Zanclorhynchus</i>	<i>Zanclorhynchus spinifer</i>	no new sequences	AY538894,AY539511	AY538999	KX230196	AY539104	AY539208	AY539413	KX230291	KX230385

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SCORPAENOIDEI										
Platycephalidae										
<i>Elates</i>	<i>Elates ransonnetii</i>	AMS 34389047	AY538902,AY539519	AY539007	MF991308	AY539112	AY539216	AY539420	Unavailable	Unavailable
<i>Platycephalus</i>	<i>Platycephalus bassensis</i>	AMS 1.39427-006	AY538903,AY539520	AY539008	MF991314	AY539113	AY539217	AY539421	Unavailable	MF991401
<i>Thysanophrys</i>	<i>Thysanophrys chiltonae</i>	KUIT 5482/KUI 32442	MF991425	KX230160	KX230194	MF991355	MF991374	MF991392	KX230289	KX230383
Hoplichthyidae										
<i>Hoplichthys</i>	<i>Hoplichthys langsdorfii</i>	FMNH 120705	MF991416	KX230154	KX230178	MF991346	MF991365	Unavailable	KF139768	KX230368
Triglidae										
<i>Bellator</i>	<i>Bellator militaris</i>	KUIT 8297/USNM 387824	MF991409	MF991325	MF991301	MF991339	MF991358	Unavailable	Unavailable	MF991393
<i>Chelidonichthys</i>	<i>Chelidonichthys lucernus</i>	R. Hanel pers. col.	EF120817	EF120859	EF609323	EF120952	EF120900	MF991378	MF966394	MF991394
<i>Lepidotrigla</i>	<i>Lepidotrigla spinosa</i>	SAM ABTC71243	AY538896,AY539513	AY539001	Unavailable	AY539106	AY539210	Unavailable	MF966399	MF991400
<i>Peristedion</i>	<i>Peristedion miniatum</i>	no new sequences	AY538899,AY539516	AY539004	KX230186	AY539109	AY539213	AY539417	KX230274	KX230375
<i>Prionotus</i>	<i>Prionotus evolans</i>	KUIT 8274/USNM 387806	MF991420	KX230157	KX230189	MF991350	MF991369	Unavailable	KF139849	KF140609
<i>Pterygotrigla</i>	<i>Pterygotrigla hemisticta</i>	FMNH 120735	MF991422	MF991335	MF991317	MF991352	MF991371	Unavailable	KF139864	Unavailable
<i>Satyrichthys</i>	<i>Satyrichthys hians</i>	FMNH 120724	MF991423	MF991336	MF991318	MF991353	MF991372	MF991390	MF966400	MF991404
Bembridae										
<i>Bembras</i>	<i>Bembras japonica</i>	no new sequences	AY538901,AY539518	AY539006	KX230166	AY539111	AY539215	AY539419	KF139691	KF140498
<i>Parabembras</i>	<i>Parabembras curtus</i>	FMNH 120713	MF991418	MF991332	MF991312	MF991348	MF991367	MF991387	KF139821	KF140591
Synanceiidae										
<i>Ablabys</i>	<i>Ablabys taenianotus</i>	no new sequences	AY538889,AY539506	AY538993	KX230162	AY539098	AY539202	AY539408	KX230243	KX230356
<i>Aetapcus</i>	<i>Aetapcus maculatus</i>	no new sequences	AY538892,AY539509	AY538997	KX230164	AY539102	AY539206	AY539412	KX230245	KX230358
<i>Apistus</i>	<i>Apistus carinatus</i>	FMNH 119634	MF991408	KX230146	KX230165	MF991338	MF991357	MF991375	KX230247	KX230359
<i>Choridactylus</i>	<i>Choridactylus multibarbus</i>	FMNH 119631	MF991412	MF991328	MF991304	MF991342	MF991361	MF991379	Unavailable	Unavailable
<i>Erisphex</i>	<i>Erisphex pottii</i>	FMNH 121034	MF991414	KX230151	KX230174	MF991344	MF991363	MF991382	KX230257	KX230364
<i>Erosa</i>	<i>Erosa erosa</i>	FMNH 121063	MF991415	MF991330	MF991309	MF991345	MF991364	MF991383	Unavailable	Unavailable
<i>Gnathanacanthus</i>	<i>Gnathanacanthus goetzei</i>	C. Burrige pers. col.	DQ533205	DQ532879	KX230176	DQ533036	DQ533376	MF991384	KX230365	KX230258
<i>Gymnapistes</i>	<i>Gymnapistes maculatus</i>	no new sequences	DQ533207	AY538994	KX230177	AY539099	AY539203	AY539409	KX230261	KX230367
<i>Inimicus</i>	<i>Inimicus sinensis</i>	AMNH uncat.	DQ533215	DQ532887	KX230179	DQ533045	DQ533384	MF991385	KX230265	Unavailable
<i>Minous</i>	<i>Minous quincarinatus</i>	FMNH 121037	MF991417	MF991331	MF991311	MF991347	MF991366	Unavailable	Unavailable	Unavailable
<i>Pataecus</i>	<i>Pataecus fronto</i>	AMS 34203001	MF991419	MF991333	MF991313	MF991349	MF991368	MF991388	Unavailable	Unavailable
<i>Synanceia</i>	<i>Synanceia verrucosa</i>	AMNH uncat.	AY538890,AY539507	AY538995	MF991321	AY539100	AY539204	AY539410	KX230285	KX230381
Neosebastidae										
<i>Maxillicosta</i>	<i>Maxillicosta whitleyi</i>	no new sequences	AY538874,AY539491	AY538978	KX230182	AY539083	AY539187	AY539394	KX230267	KX230370
<i>Neosebastes</i>	<i>Neosebastes pandus</i>	SAM ABTC71238	DQ533252	DQ532917	KX230184	DQ533076	DQ533414	MF991386	KX230273	KX230372
Plectrogeniidae										
<i>Bembradium</i>	<i>Bembradium roseum</i>	ASIZ P0071570	MF991410	MF991326	MF991302	MF991340	MF991359	Unavailable	Unavailable	Unavailable
<i>Plectrogenium</i>	<i>Plectrogenium nanum</i>	no new sequences	AY538900,AY539517	AY539005	KX230187	AY539110	AY539214	AY539418	KX230275	KX230376

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Scorpaenidae										
<i>Adelosebastes</i>	<i>Adelosebastes latens</i>	KUIT 2327/KUI 28431	MF991407	MF991324	Unavailable	MF991337	MF991356	Unavailable	Unavailable	Unavailable
<i>Caracanthus</i>	<i>Caracanthus maculatus</i>	no new sequences	AY538895,AY539512	AY539000	KX230168	AY539105	AY539209	AY539414	KX230252	KX230361
<i>Dendrochirus</i>	<i>Dendrochirus brachypterus</i>	no new sequences	AY538886,AY539503	AY538990	FJ583345	AY539095	AY539199	AY539405	Unavailable	Unavailable
<i>Ectreposebastes</i>	<i>Ectreposebastes imus</i>	R. Hanel pers. col.	MF991413	MF991329	MF991307	MF991343	MF991362	MF991381	Unavailable	Unavailable
<i>Helicolenus</i>	<i>Helicolenus dactylopterus</i>	AMNH uncat.	AY538871,AY539488	AY538975	MF991310	AY539080	AY539184	AY539391	MF966398	MF991398
<i>Hozukius</i>	<i>Hozukius emblemarius</i>	no new sequences	Unavailable	DQ678293	DQ678396	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
<i>Pontinus</i>	<i>Pontinus longispinis</i>	AMNH uncat.	AY538878,AY539495	AY538982	KX230188	AY539087	AY539191	AY539398	KX230276	MF991402
<i>Pteroidichthys</i>	<i>Pteroidichthys amboinensis</i>	AMNH uncat.	MF991421	MF991334	MF991315	MF991351	MF991370	MF991389	Unavailable	Unavailable
<i>Pterois</i>	<i>Pterois volitans</i>	KUIT 8264/USNM 387797	AY538887,AY539504	AY538991	MF991316	AY539096	AY539200	AY539406	KX230278	KX230377
<i>Scorpaena</i>	<i>Scorpaena guttata</i>	SIO 01-198	AY538880,AY539497	AY538984	DQ027989	AY539089	AY539193	AY539400	KX230281	MF991405
<i>Scorpaenodes</i>	<i>Scorpaenodes guamensis</i>	KUIT 5521/KUI 32461	MF991424	KX230159	HQ945882	MF991354	MF991373	MF991391	KX230282	KX230378
<i>Scorpaenopsis</i>	<i>Scorpaenopsis macrochir</i>	KUI 41392	AY538883,AY539500	AY538987	MF991319	AY539092	AY539196	AY539402	Unavailable	Unavailable
<i>Sebastes</i>	<i>Sebastes matsubarae</i>	no new sequences	AY538873,AY539490	AY538977	KX230191	AY539082	AY539186	AY539393	KX230283	KX230379
<i>Sebastiscus</i>	<i>Sebastiscus marmoratus</i>	C. Taylor pers. col.	AY538885,AY539502	AY538989	MF991320	AY539094	AY539198	AY539404	Unavailable	Unavailable
<i>Sebastolobus</i>	<i>Sebastolobus macrochir</i>	C. Taylor pers. col.	AY538875,AY539492	AY538979	JF952856	AY539084	AY539188	AY539395	MF966401	MF991406
<i>Setarches</i>	<i>Setarches guentheri</i>	no new sequences	AY538888,AY539505	AY538992	GU805018	AY539097	AY539201	AY539407	KX230284	KX230380
<i>Taenionotus</i>	<i>Taenionotus triacanthus</i>	no new sequences	AY538884,AY539501	AY538988	KX230192	AY539093	AY539197	AY539403	Unavailable	Unavailable
<i>Trachyscorpia</i>	<i>Trachyscorpia cristulata</i>	G. Lecointre pers. col.	AY538876,AY539493	AY538980	MF991322	AY539085	AY539189	AY539396	Unavailable	Unavailable