

Table S5. List of sequences used in this study. Sequences obtained in this study are in bold.

Species	Genbank accession numbers				
	<i>cox1</i>	<i>16S</i>	<i>18S</i>	<i>28S</i>	<i>H3</i>
<i>Septifer excisus</i> A	–	KY081320	KY081343	KY081367	KY081390
<i>Septifer excisus</i> B	KY081306	KY081321	KY081344	KY081368	KY081391
<i>Septifer excisus</i> 1	PV123042	PV112093	PV104449	PV104720	–
<i>Septifer excisus</i> 2	PV123043	PV112094	PV104450	PV104721	–
<i>Mytilisepta virgata</i>	AB076941	AB372228	KJ453817	KJ453832	–
<i>Mytilisepta virgata</i> 1	PV123033	PV112086	PV104440	PV104711	PV114815
<i>Mytilisepta virgata</i> 2	PV123034	PV112087	PV104441	PV104712	PV114816
<i>Mytilisepta virgata</i> 3	PV123035	PV112088	PV104442	PV104713	PV114817
<i>Mytilisepta virgata</i> 4	PV123036	PV112089	PV104443	PV104714	PV114818
<i>Mytilisepta keenae</i> A	OR618308	–	–	KY568840	KY568811
<i>Mytilisepta keenae</i> B	OR618307	–	–	KY568836	KY568810
<i>Mytilisepta bifurcatus</i>	–	–	KJ453815	KJ453831	–
<i>Septifer bilocularis</i> A	–	–	MK629441	MK629446	MK642880
<i>Septifer bilocularis</i> B	–	–	MK629442	MK629447	MK642881
<i>Brachidontes</i> sp. 1	PV123040	PV112092	PV104447	PV104718	–
<i>Brachidontes</i> sp. 2	PV123041	–	PV104449	PV104719	–
<i>Byssogerdus striatulus</i> 1	PV123037	PV112090	PV104444	PV104715	PV114812
<i>Byssogerdus striatulus</i> 2	PV123038	PV112091	PV104445	PV104716	PV114813
<i>Byssogerdus subsulcatus</i>	PV123039	–	PV104446	PV104717	PV114814
<i>Brachidontes mutabilis</i>	KY081291	–	KY081328	KY081351	KY081375
<i>Brachidontes crebristriatus</i>	KY081292	KY081314	KY081329	KY081352	KY081376
<i>Brachidontes mutabilis</i> 1	PV123029	PV112082	PV104436	PV104707	PV114810
<i>Brachidontes mutabilis</i> 2	PV123030	PV112083	PV104437	PV104708	PV114811
<i>Brachidontes mutabilis</i> 3	PV123031	PV112084	PV104438	PV104709	PV136466
<i>Brachidontes mutabilis</i> 4	PV123032	PV112085	PV104439	PV104710	PV136467
<i>Brachidontes variabilis</i> A	KX258464	KY081312	KY081327	KY081350	KY081374
<i>Brachidontes variabilis</i> B	PP741796	DQ836014	–	–	–
<i>Brachidontes variabilis</i> 1	PV123024	PV112078	PV104431	PV104702	PV114808
<i>Brachidontes variabilis</i> 2	PV123025	PV112079	PV104432	PV104703	PV114809
<i>Brachidontes variabilis</i> 3	PV123026	PV112080	PV104433	PV104704	PV136468
<i>Brachidontes variabilis</i> 4	PV123027	PV112081	PV104434	PV104705	PV136469
<i>Brachidontes rodriguezii</i>	KC844477	–	DQ640530	KC844362	–
<i>Brachidontes pharaonis</i> A	PP741743	MF345860	–	–	–
<i>Brachidontes pharaonis</i> B	PP741742	MF345859	–	–	–
<i>Brachidontes erosus</i> A	PP510689	PP510989	–	–	PP508284
<i>Brachidontes erosus</i> B	PP510686	PP510986	–	–	PP508281
<i>Brachidontes ustulatus</i> A	PP510693	PP510993	–	–	PP508288
<i>Brachidontes ustulatus</i> B	PP510695	PP510995	–	–	PP508290
<i>Brachidontes exustus</i>	KX713447	KX713196	KT757791	KT757838	–
<i>Geukensia demissa</i> A	OP454295	AJ586484	L78853	AY145405	–
<i>Geukensia demissa</i> B	OP454296	U68772	–	–	–

<i>Geukensia demissa</i> C	GQ282963	–	L33450	AY622004	–
<i>Perumtilus purpuratus</i>	KF661934	KF661917	KJ453821	KJ598046	–
<i>Mytilus edulis</i> A	PQ739204	AF023550	L24489	–	AY267749
<i>Mytilus edulis</i> B	KC429095	KC429249	KC429331	KC429424	KC429166
<i>Mytilus chilensis</i>	PQ423088	–	DQ640510	–	AY267746
<i>Mytilus galloprovincialis</i>	–	–	DQ640507	–	AY267748
<i>Trichomya hirsuta</i>	PV123028	–	PV104435	PV104706	PV136470
<i>Trichomya hirsuta</i> A	GQ480305	GQ472163	–	–	–
<i>Trichomya hirsuta</i> B	MF320282	MF320291	–	–	MF320285
<i>Trichomya hirsuta</i> C	KX713503	KX713260	KX713350	KX713436	KX713583
<i>Perna perna</i>	OM333931	DQ923882	DQ640520	MW227539	MW191802
<i>Perna canaliculus</i>	DQ343594	AB265681	DQ640523	–	–
<i>Perna viridis</i> A	KY081304	KY081318	KY081342	KY081366	–
<i>Perna viridis</i> B	DQ343590	AY262338	DQ640528	KY568869	KY568781
<i>Arcuatula senhousia</i> A	KY081302	–	KY081340	KY081364	KY081388
<i>Arcuatula senhousia</i> B	KY081303	–	KY081341	KY081365	KY081389
<i>Musculus discors</i>	KF643642	KR827553	AF124206	–	KP113647
<i>Mytella strigata</i>	OP921313	OP925874	DQ310715	–	–
<i>Modiolus modiolus</i> A	KX901459	KX901458	AF124210	KY568853	KY568767
<i>Modiolus modiolus</i> B	KX452401	KX901457	EF526454	EF526455	KY568766
<i>Modiolus rumphii</i>	KC429094	KC429248	KC429330	KC429423	KC429165
<i>Modiolus</i> sp. A	KY081299	–	KY081337	KY081361	KY081385
<i>Modiolus</i> sp. B	KY081300	–	KY081338	KY081362	KY081386
<i>Modiolus auriculatus</i>	KY081298	–	KY081336	KY081360	KY081384
<i>Benthomodiolus lignocola</i>	AY275545	KF611733	AF221648	AY781131	KF720596
<i>Lignomodiolus</i> ESU G	FJ937161	KF611744	KF611710	GU065778	KF720606
<i>Gigantidas taiwanensis</i>	GU966638	KF611746	KF611711	GU966641	KF720608
<i>Gigantidas mauritanicus</i>	–	KF611747	KF611712	FJ890504	KF720609
<i>Gigantidas haimaensis</i>	–	MK534971	MK534966	–	MK534959
<i>Leiosolenus mucronatus</i>	KY081297	KY081317	KY081333	KY081357	KY081381
<i>Leiosolenus malaccanus</i>	OQ002355	–	–	–	OQ053562
<i>Leiosolenus lima</i>	OQ002352	KY081316	KY081332	KY081355	KY081379
<i>Botula fusca</i>	OP682771	–	AB569157	–	OP654478
<i>Bathymodiolus septemdierum</i>	PQ472631	–	OQ685840	–	PQ497021
<i>Bathymodiolus heckerae</i>	OM799113	–	–	MG520058	–
<i>Idas iwaotakii</i>	PP936109	–	–	–	KF720634
<i>Xenostrobus securis</i>	ON310819	KY272989	KC509629	KC509763	MN043301
<i>Xenostrobus pulex</i>	KC509680	–	KC509767	KC509757	MN043311
<i>Vignadula atrata</i>	OL877250	–	AB594348	MN889242	–
<i>Magallana angulata</i>	KY081307	KY081322	KY081345	KY081369	KY081392
<i>Pinna muricata</i>	KY081311	KY081326	KY081349	KY081373	KY081395
<i>Barbatia trapezina</i>	KY081309	KY081324	KY081347	KY081371	–