

Table S1. Relevant sequence information downloaded from GenBank in this study.

Taxon	Strain	GenBank accession		
		nuclear SSU	Plastid SSU	Plastid LSU
<i>Colacium mucronatum</i>	SAG1211-1	AJ532441	EU221482	EF525388
<i>Colacium mucronatum</i>	Jjockji033107A	FJ719601	FJ719645	FJ719710
<i>Cryptoglana longisulca</i>	Banryong092609E	JQ356759	JQ356806	JQ356828
<i>Cryptoglana pigra</i>	CCAP1212-1	AJ532437	EU221483	EF525364
<i>Cryptoglana similis</i>	Bubsu100210T	JQ356767	JQ356814	JQ356836
<i>Cryptoglana skujae</i>	Darinun060709E	JQ356770	JQ356817	JQ356839
<i>Cryptoglana soropigra</i>	Cheongsan052507B	JQ356778	JQ356825	JQ356847
<i>Discoplastis adunca</i>	Beopsu100210Q	KT304824	KT305058	KT305152
<i>Discoplastis spathirhyncha</i>	SAG 1224-42	AJ532454	NC039969	NC039969
<i>Discoplastis</i> sp.	Banmun010910B	KT304825	KT305059	KT305153
<i>Flexiglana variabilis</i>	UW2241Kie	MT591637	MT591617	MT591598
<i>Flexiglana variabilis</i>	UW2078Moc	MT591636	MT591616	MT591597
<i>Euglena adhaerens</i>	Songdang042007A	KT304822	KT305046	KT305129
<i>Euglena agilis</i>	MI08	FJ719607	FJ719652	EF525322
<i>Euglena carterae</i>	SAG 1224-22	AJ532406	EU373477	KT305131
<i>Euglena chadefaudii</i>	CCAP 1224/17p	EU370488	EU370506	EF525302

<i>Euglena clara</i>	SAG25.98	AJ532423	EU750707	EF525326
<i>Euglena deses</i>	SAG 1224-19b	AJ532409	AY626043	KT305132
<i>Euglena deses</i> var. <i>mesnili</i>	SAG1224-20	AJ532410	FJ719656	EF525328
<i>Euglena gracilis</i>	SAG 1224-5/25	AJ532426	NC001603	NC001603
<i>Euglena graculata</i>	ACOI 921	AY626062	AF289242	KT305136
<i>Euglena gymnodinioides</i>	MI03	DQ140148	EU221486	EF525324
<i>Euglena hiemalis</i>	CCAP1224.35	DQ140157	AY070247	MF622086
<i>Euglena pseudochadefaudii</i>	MI 00	AY523033	EU370509	EF525303
<i>Euglena mutabilis</i>	NJ	AY523038	EU221489	EF525329
<i>Euglenaria anabaena</i>	Geumdong090304B	FJ719616	FJ719667	FJ719721
<i>Euglenaria anabaena</i> var. <i>minima</i>	NJ05	DQ140155	EU221485	EF525331
<i>Euglenaria clavata</i>	SAG 1224-32	AJ532436	KT305057	KT305150
<i>Eugleniformis proxima</i>	SAG 1224-11a	DQ140147	EU624027	KT305151
<i>Lepocinclis acus</i>	Tai	KT304826	KT305060	KT305154
<i>Lepocinclis fusca</i>	ASW08080	KT304827	KT305061	KT305155
<i>Lepocinclis ovum</i>	SAG 1244-8	AF110419	AY221726	EF525352
<i>Lepocinclis spinosa</i>	Bangudae101407E	KT304837	KT305071	KT305165
<i>Lepocinclis spirogyroides</i>	Yeonhwaji050407A	FJ719619	FJ719676	FJ719724
<i>Lepocinclis steinii</i>	Cheongsan052507K5	KT304841	KT305076	KT305170

<i>Lepocinclis tripteris</i>	SAG1224-16	AJ532456	EU221497	FJ719725
<i>Monomorphina aenigmatica</i>	ASW08012	AF283313	JN603922	JN603958
<i>Monomorphina parapyrum</i>	ACOI1300	FJ719622	FJ719678	EF525358
<i>Monomorphina piriformis</i>	ASW08011	AJ532435	JN603935	JN603971
<i>Monomorphina piropsis</i>	MI	JN603846	JN603932	JN603968
<i>Monomorphina piroria</i>	ASW08059	JN603869	JN603957	JN603994
<i>Monomorphina pseudopyrum</i>	Gungnamji122107H	JN603856	JN603944	JN603981
<i>Monomorphina pyrum</i>	ASW08010	JN603858	JN603946	JN603983
<i>Monomorphina soropyrum</i>	ASW08035	JN603867	JN603955	JN603992
<i>Phacus granum</i>	Gungnamji052507H	FJ719627	FJ719683	FJ719730
<i>Phacus inflexus</i>	ACOI1336	FJ719629	FJ719684	EF525347
<i>Phacus oscillan</i>	Cheongsan052507J	FJ719632	FJ719688	FJ719732
<i>Phacus skujae</i>	ACOI 1312	FJ719636	FJ719694	FJ719736
<i>Phacus smulkowskianus</i>	SAG58.81	AJ532467	FJ719693	EF525344
<i>Trachelomonas abrupta</i>	NJ T801	DQ140134	EU221507	EF525379
<i>Trachelomonas armata</i>	ACOI 1323	EF999904	EU221508	KT305176
<i>Trachelomonas bernardinensis</i>	ACOI 1103	EF999908	FJ719641	FJ719746
<i>Trachelomonas cingulata</i>	SAG1283-21	FJ719642	FJ719705	EF525368
<i>Trachelomonas echinata</i>	SAG1283-22	AJ532444	EU221510	EF525369

<i>Trachelomonas ellipsoidalis</i>	NJ T1	DQ140135	EU221511	FJ719747
<i>Trachelomonas grandis</i>	SAG204.80	AJ532446	EU221512	EF525382
<i>Trachelomonas hispida</i> var. <i>coronata</i>	UTEX539	FJ719643	EU221513	EF525375
<i>Trachelomonas hispida</i> var. <i>coronata</i>	Jigock121309C	KT304850	KT305086	KT305177
<i>Trachelomonas intermedia</i>	SAG200.80	AY015002	FJ719706	EF525366
<i>Trachelomonas lefevrei</i>	Bibong100404-5	KT304851	KT305087	KT305178
<i>Trachelomonas lefevrei</i>	Pungcheon093006B	KT304852	KT305088	KT305179
<i>Trachelomonas lefevrei</i>	SAG1283-10	DQ140136	EU221514	EF525370
<i>Trachelomonas oblonga</i>	NJ T516	DQ140137	EU221515	EF525370
<i>Trachelomonas pertyi</i>	SAG1283-13	AJ532443	FJ719707	EF525367
<i>Trachelomonas planctonica</i>	NJ WT1	DQ140138	EU221516	EF525380
<i>Trachelomonas rugulosa</i>	NJ TS2	DQ140140	EU221517	EF525383
<i>Trachelomonas scabra</i>	NJ T235	DQ140141	EU221518	KT305181
<i>Trachelomonas similis</i>	Kwoanam102007J	KT304854	KT305089	KT305182
<i>Trachelomonas similis</i>	SAG 1283-14	DQ249885	FJ719708	EF525381
<i>Trachelomonas similis</i>	Suwol060709E	KT304857	KT305092	KT305185
<i>Trachelomonas similis</i>	Yongsu042007A	KT304856	KT305091	KT305184
<i>Trachelomonas similis</i>	Namdong090404-4	KT304855	KT305090	KT305183
<i>Trachelomonas volvocina</i>	UTEX1327	KT304892	EU221519	EF525373

<i>Trachelomonas volvocinopsis</i>	SAG1283-16	DQ140144	EU221520	EF525372
<i>Trachelomonas zorensis</i>	UTEX 1331	DQ140145	EU221521	EF525371
<i>Strombomonas acuminata</i>	Heontang090509C	KT304844	KT305080	KT305172
<i>Strombomonas acuminata</i>	Wolrong110406AS	KT304846	KT305082	KT305174
<i>Strombomonas acuminata</i>	Migok033107D	KT304845	KT305081	KT305173
<i>Strombomonas acuminata</i>	SAG1280-1	AJ532450	EU221506	EF525384
<i>Strombomonas balvayi</i>	Cp1D	FJ719640	FJ719698	FJ719739
<i>Strombomonas borystheniensis</i>	S10	DQ140131	FJ719699	FJ719740
<i>Strombomonas costata</i>	ACOI1273	DQ140152	FJ719700	FJ719741
<i>Strombomonas eurystoma</i>	S600	DQ140132	FJ719701	FJ719742
<i>Strombomonas ovalis</i>	S115	DQ140133	FJ719702	FJ719743
<i>Strombomonas triquetra</i>	S604	DQ14015	FJ719703	FJ719744
<i>Strombomonas verrucosa</i>	S5C	AF44546	FJ719704	FJ719745
