

Table S1 Source species and Genbank® accession number of each channelrhodopsin shown in Fig. 1

Gene	Source species	Genbank® Accession number	Reference
AgChR	<i>Asteromonas gracilis-B</i>	KF992038	1
BsChR1	<i>Brachiomonas submarina</i>	KF992086	1
BsChR2	<i>Brachiomonas submarina</i>	KF992034	1
CbChR1	<i>Chlamydomonas bilatus-A</i>	KF992062	1
CnChR1 /Chrimson	<i>Chlamydomonas noctigama</i>	KF992060	1
CnChR2	<i>Chlamydomonas noctigama</i>	KF992073	1
CoChR	<i>Chloromonas oogama</i>	KF992041	1
CrChR1	<i>Chlamydomonas reinhardtii</i>	AB058890/AF385748	2, 3
CrChR2	<i>Chlamydomonas reinhardtii</i>	AB058891/AF461397	3, 4
CsChR	<i>Chloromonas subdivisa</i>	KF992078	1
HdChR	<i>Haematococcus droebakensis</i>	KF992059	1
MvChR1	<i>Mesostigma viride</i>	JF922293	5
NsChR2	<i>Neochlorosarcina sp.</i>	KF992054	1
PsChR2	<i>Platymonas subcordiformis</i>	JX983143	6
SdChR	<i>Scherffelia dubia</i>	KF992072	1
ShChR /Chronos	<i>Stigeoclonium helveticum</i>	KF992040	1
TcChR	<i>Tetraselmis cordiformis</i>	KF992057	1
TsChR	<i>Tetraselmis striata</i>	KF992089	1
VcChR1	<i>Volvox carteri</i>	EU285658	7
VcChR2	<i>Volvox carteri</i>	EU285660	7

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