

Sequence comparison of *psaA*, *psaB* and *rbcl* from several volvocine species.

Compared species			<i>psaA</i> ^a		<i>psaB</i> ^b		<i>rbcl</i> ^c	
			% Identity	% Gaps	% Identity	% Gaps	% Identity	% Gaps
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Gonium pectorale</i> CCAP 32/14	### 97.83	0.00	## 94.34	1.26	### 98.47	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Gonium pectorale</i> NIES-1710	### 97.83	0.00	## 94.34	1.26	## 98.25	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Gonium pectorale</i> NIES-569	### 97.83	0.00	### 94.65	1.26	### 98.47	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Gonium quadratum</i> NIES-653	88.63	3.32	88.4	1.88	93.65	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Gonium viridistellatum</i> UTEX 2519	## 94.46	0.00	89.24	0.00	93.87	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Gonium octonarium</i> GO-LC-1+	92.53	0.00	86.77	5.54	# 94.09	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Gonium multicocum</i> UTEX 2580	# 93.49	0.00	88.92	0.00	93	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Basichlamys sacculifera</i> NIES-566	90.87	0.48	88.29	0.00	91.47	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Tetraebaena socialis</i> NIES-571	91.11	0.48	86.83	1.88	92.12	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Astrephomene perforata</i> NIES-564	88.92	0.00	86.08	0.00	87.53	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Astrephomene gubernaculifera</i> NIES-418	89.66	0.48	86.60	3.12	88.18	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Pandorina morum</i> NIES-574	88.57	2.38	85.09	3.73	92.12	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Pleodorina californica</i> UTEX 809	90.84	0.00	89.03	1.88	91.94	0.87
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Eudorina elegans</i> NIES-456	91.35	0.48	# 90.82	0.00	93.25	0.87
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Eudorina unicocca</i> UTEX 1215	90.38	0.48	90.51	0.00	91.07	0.87
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Volvox carteri</i> NIES-732	89.88	0.00	88.71	1.88	91.94	0.87
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Volvox globator</i> UTEX 955	90.6	0.00	87.66	0.00	91.68	0.00
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Volvox aureus</i> NIES-541	89.64	0.00	90.51	0.00	90.85	0.87
<i>Gonium pectorale</i> SAG 12.85	vs.	<i>Chlamydomonas reinhardtii</i> 137C	91.11	0.48	87.66	0.00	92.14	0.44
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Gonium pectorale</i> SAG 12.85	## 97.83	0.00	# 94.34	1.26	# 98.47	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Gonium pectorale</i> NIES-1710	### 100.00	0.00	## 99.37	0.00	## 99.78	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Gonium pectorale</i> NIES-569	### 100.00	0.00	### 99.68	0.00	### 100.00	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Gonium quadratum</i> NIES-653	89.34	3.32	89.27	0.63	93.44	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Gonium viridistellatum</i> UTEX 2519	# 95.42	0.00	91.17	0.63	93.65	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Gonium octonarium</i> GO-LC-1+	93.01	0.00	89.59	0.63	93.87	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Gonium multicocum</i> UTEX 2580	93.01	0.00	89.87	0.00	92.78	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Basichlamys sacculifera</i> NIES-566	91.59	0.48	88.96	0.63	91.68	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Tetraebaena socialis</i> NIES-571	91.61	0.96	86.07	4.33	91.9	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Astrephomene perforata</i> NIES-564	89.16	0.00	88.61	0.00	87.75	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Astrephomene gubernaculifera</i> NIES-418	89.18	0.48	88.29	0.00	88.4	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Pandorina morum</i> NIES-574	88.81	2.38	88.64	0.63	92.34	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Pleodorina californica</i> UTEX 809	91.08	0.00	88.44	2.50	92.16	0.87
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Eudorina elegans</i> NIES-456	91.11	0.48	89.97	1.88	93.9	0.87
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Eudorina unicocca</i> UTEX 1215	90.87	0.48	89.87	0.00	91.72	0.87
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Volvox carteri</i> NIES-732	90.6	0.00	88.51	3.73	92.16	0.87
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Volvox globator</i> UTEX 955	91.08	0.00	89.24	0.00	91.47	0.00
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Volvox aureus</i> NIES-541	89.88	0.00	89.97	1.88	91.07	0.87
<i>Gonium pectorale</i> CCAP 32/14	vs.	<i>Chlamydomonas reinhardtii</i> 137C	90.38	0.48	86.56	2.50	92.39	1.30

<i>Gonium pectorale</i> NIES-1710	vs.	<i>Gonium pectorale</i> SAG 12.85	##	97.83	0.00	#	94.34	1.26	##	98.25	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Gonium pectorale</i> CCAP 32/14	###	100.00	0.00	##	99.37	0.00	###	99.78	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Gonium pectorale</i> NIES-569	###	100.00	0.00	###	99.68	0.00	###	99.78	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Gonium quadratum</i> NIES-653		89.34	3.32		89.27	0.63		93.22	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Gonium viridistellatum</i> UTEX 2519	#	95.42	0.00		91.17	0.63		93.44	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Gonium octonarium</i> GO-LC-1+		93.01	0.00		89.59	0.63	#	93.65	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Gonium multicoccum</i> UTEX 2580		93.01	0.00		89.87	0.00		92.56	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Basichlamys sacculifera</i> NIES-566		91.59	0.48		88.96	0.63		91.47	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Tetrabaena socialis</i> NIES-571		91.61	0.96		86.07	4.33		91.68	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Astrephomene perforata</i> NIES-564		89.16	0.00		88.61	0.00		87.53	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Astrephomene gubernaculifera</i> NIES-418		89.18	0.48		88.29	0.00		88.62	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Pandorina morum</i> NIES-574		88.81	2.38		88.64	0.63		92.12	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Pleodorina californica</i> UTEX 809		91.08	0.00		88.44	2.50		91.94	0.87
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Eudorina elegans</i> NIES-456		91.11	0.48		89.97	1.88		93.68	0.87
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Eudorina unicocca</i> UTEX 1215		90.87	0.48		89.87	0.00		91.5	0.87
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Volvox carteri</i> NIES-732		90.6	0.00		88.51	3.73		91.94	0.87
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Volvox globator</i> UTEX 955		91.08	0.00		89.24	0.00		91.25	0.00
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Volvox aureus</i> NIES-541		89.88	0.00		89.97	1.88		90.85	0.87
<i>Gonium pectorale</i> NIES-1710	vs.	<i>Chlamydomonas reinhardtii</i> 137C		90.38	0.48		86.56	2.50		92.17	1.30

Comparison of cDNA sequences. ^aFragment lengths 415 bp. ^bFragment lengths 316 bp. ^cFragment lengths 457 bp. ###, ##, #: Highest, second highest and third highest identity value in the given data set, respectively.