

### Variable positions among the SSU rDNA sequences

Genera	Base position in the alignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	1	1	2	2	2	2	2	4	4	4	4	4	4	5	6	6	6	6	6	6	6	6	6	6
		4	4	5	5	5	9	9	5	6	6	6	6	7	7	7	7	7	1	3	3	3	4	4	4	4	5	5	5	6
		7	9	3	4	6	4	5	4	0	1	3	4	5	6	7	8	0	1	5	6	6	5	6	7	8	4	5	7	0
STICHOCOCCUS (8)	SAG 335-8	A	A	C	U	U	A	A	U	U	-	C	A	U	U	U	U	U	A	U	C	U	A	-	A	G	U	U	U	
	SAG 56.91	A	A	C	U	U	A	A	U	U	-	C	A	U	U	U	U	U	A	U	C	U	A	-	A	G	-	U	U	
	SAG 379-2	A	A	C	U	U	A	A	U	U	-	C	A	U	U	U	U	U	A	U	C	U	A	-	A	G	-	U	U	
	SAG 379-1b	A	A	C	U	U	A	A	U	U	-	C	A	U	U	U	U	U	A	U	C	U	A	-	A	G	U	U	U	
	SAG 249.80	A	A	C	U	U	A	A	U	U	-	C	A	U	U	U	U	U	A	U	C	U	A	-	A	G	-	U	U	
DESMOCOCCUS (2)	SAG 25.92	A	A	C	U	U	A	A	U	U	-	C	U	U	U	C	A	U	A	U	C	U	C	-	A	U	G	U	U	
	SAG 1.92	A	A	C	U	U	A	A	U	U	-	C	U	U	U	C	A	U	A	U	C	U	C	-	A	U	G	U	U	
	SAG 1.94	A	A	C	U	U	A	A	U	U	-	C	U	U	U	C	A	U	A	U	C	U	C	-	A	U	G	U	U	
	SAG 63.90	A	A	C	U	U	A	A	U	U	-	C	U	U	U	C	A	U	A	U	C	U	C	-	A	U	G	U	U	
PROTOSTICHOCOCCUS (5)	SAG 2481	A	A	C	U	U	A	A	U	A	-	C	U	U	U	C	A	C	U	U	C	G	U	U	U	U	G	C	U	
DEUTEROSTICHOCOCCUS (0)	SAG 107.80	A	A	C	U	U	A	A	U	C	-	C	U	U	U	C	A	U	U	C	C	G	U	U	U	U	G	U	U	
	SAG 108.80	A	A	C	U	U	A	A	U	C	-	C	U	U	U	C	A	U	U	C	C	G	U	U	U	U	G	U	U	
	SAG 2139	A	A	C	U	U	A	A	U	U	U	C	U	U	U	C	A	U	U	C	C	G	U	U	U	U	G	C	U	
	SAG 2060	A	A	C	U	U	A	A	U	C	C	C	U	U	U	C	A	U	U	C	C	G	U	U	U	U	G	C	U	
	SAG 2119	A	A	C	U	U	A	A	U	C	C	C	U	U	U	C	A	U	U	C	C	G	U	U	U	U	G	C	U	
	SAG 10.97	A	A	C	U	U	A	A	U	C	U	C	U	U	U	C	A	U	U	C	C	G	U	U	U	U	G	C	U	
	SAG 2482	A	A	C	U	U	A	A	U	C	C	C	U	U	U	C	A	U	U	C	U	G	U	U	U	U	G	C	U	
	ST-3	A	A	C	U	U	A	A	U	C	C	C	U	U	U	C	A	U	U	C	C	G	U	U	U	U	G	C	U	
	ST-4	A	A	C	U	U	A	A	U	C	C	C	U	U	U	C	A	U	U	C	C	G	U	U	U	U	G	C	U	
TRITOSTICHOCOCCUS (5)	SAG 2406	A	A	C	U	U	A	A	U	C	-	C	U	U	U	C	A	U	U	C	C	G	U	U	U	U	G	C	U	
	ST-7	G	A	C	U	C	A	A	U	C	-	C	U	U	U	C	A	U	U	U	C	U	A	-	A	U	G	C	U	
	ST-6	G	A	C	U	C	G	A	U	C	-	C	U	U	U	C	A	U	U	U	C	U	A	-	A	U	G	C	U	
	ST-8	G	A	C	U	C	A	A	U	C	-	C	U	U	U	C	A	U	U	U	C	U	A	-	A	U	G	C	U	
	ST-9	G	A	C	U	C	A	A	C	C	-	C	U	U	U	C	A	U	U	U	C	G	U	-	U	U	G	C	U	
	ST-2	A	A	C	U	U	A	A	U	C	-	U	U	C	A	U	A	U	U	U	C	G	U	-	U	U	G	C	U	
DIPLOSPHAERA (4)	SAG 11.88	A	G	A	C	U	A	A	U	C	-	C	U	U	U	C	A	U	U	U	C	G	C	U	U	U	G	C	C	
	SAG 48.86	A	G	A	C	U	A	A	U	C	-	C	U	U	U	C	A	U	U	U	C	G	C	U	U	U	G	C	C	
	SAG 49.86	A	G	A	C	U	A	A	U	C	-	C	U	U	U	C	A	U	U	U	C	G	C	U	U	U	G	C	C	
	SAG 2.82	A	G	A	C	U	A	A	U	C	-	C	U	U	U	C	A	U	U	U	C	G	C	U	U	U	G	C	C	
	SAG 9.82	A	G	A	C	U	A	A	U	C	-	C	U	U	U	C	A	U	U	U	C	G	C	U	U	U	G	C	C	
	SAG 2049	A	G	A	C	U	A	A	U	C	C	U	U	U	U	C	A	U	U	U	C	G	C	U	U	U	G	C	C	
TETRATOSTICHOCOCCUS (2)	SAG 2138	A	A	C	U	U	A	A	U	C	C	C	U	U	U	C	A	U	U	C	C	G	U	U	U	U	G	C	U	
PSEUDOSTICHOCOCCUS (8)	SAG 379-4	A	A	C	U	U	A	A	U	U	C	C	U	U	U	C	A	U	U	U	C	G	U	U	U	U	G	C	U	
	SAG 380-1	A	A	C	U	U	A	A	U	U	C	U	U	U	U	C	A	U	U	U	C	G	U	U	U	U	G	C	U	
	SAG 2067	A	A	C	U	U	A	U	U	U	U	C	U	U	U	C	A	U	U	U	C	G	U	U	U	U	G	C	U	
	UTEX 2249	A	A	C	U	U	A	A	U	U	U	C	U	U	U	C	A	U	U	U	C	G	U	U	U	U	G	C	U	
	CBC	-	-	-	-	-	-	-	-	-	-	*	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-		
	HCBC	-	*	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-	*		
	NHS	-	*	*	*	-	-	-	-	*	-	-	*	-	-	*	*	*	-	-	-	-	-	-	-	*	-	-	*	
STICHOCOCCUS																														
DESMOCOCCUS																														
PROTOSTICHOCOCCUS																														
DEUTEROSTICHOCOCCUS																														
TRITOSTICHOCOCCUS																														
DIPLOSPHAERA																														
TETRATOSTICHOCOCCUS																														
PSEUDOSTICHOCOCCUS																														

Genera	Base position in the alignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
		6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	0	0	0	2	3	3	3	3	3	3	3	3
		6	6	6	7	8	0	0	0	0	0	0	1	2	2	4	6	3	4	5	4	3	3	4	4	4	4	5	5
		1	2	6	0	0	2	3	4	7	8	9	5	4	6	4	4	4	2	2	4	9	5	9	0	4	6	9	5
STICHOCOCCUS (8)	SAG 335-8	G	G	C	C	U	C	A	C	U	C	U	U	A	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
	SAG 56.91	G	G	C	C	U	C	A	C	U	C	U	U	A	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
	SAG 379-2	G	G	C	C	U	C	A	C	U	C	U	U	A	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
	SAG 379-1b	G	G	C	C	U	C	A	C	U	C	U	U	A	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
	SAG 249.80	U	G	C	C	U	C	A	C	U	C	U	U	A	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
DESMOCOCCUS (2)	SAG 25.92	G	G	A	C	U	A	G	U	U	C	C	C	A	G	U	C	U	C	A	G	U	C	U	U	-	C	C	
	SAG 1.92	G	G	C	C	U	A	A	C	U	C	C	C	A	G	U	C	U	C	A	G	U	C	U	U	-	C	C	
	SAG 1.94	G	G	C	C	U	A	A	C	U	C	C	C	A	G	U	C	U	C	A	G	U	C	U	U	-	C	C	
	SAG 63.90	G	G	C	C	U	A	A	C	U	C	C	C	A	G	U	C	U	C	A	G	U	C	U	U	-	C	C	
PROTOSTICHOCOCCUS (5)	SAG 2481	G	G	C	C	U	C	A	C	U	C	C	U	A	G	U	C	C	C	G	G	C	A	U	U	U	-	C	C
DEUTEROSTICHOCOCCUS (0)	SAG 107.80	G	A	C	C	U	A	A	C	U	C	C	U	A	G	U	C	U	C	A	G	C	U	C	U	U	U	C	C
	SAG 108.80	G	A	C	C	U	A	A	C	U	C	C	U	A	G	U	C	U	C	A	G	C	U	C	U	U	U	C	C
	SAG 2139	G	A	C	C	U	A	A	C	U	C	C	U	A	G	U	C	U	C	A	G	C	U	C	U	U	U	C	U
	SAG 2060	G	A	C	C	U	A	A	C	U	C	C	U	A	G	U	C	U	C	A	G	C	U	C	U	U	U	U	C
	SAG 2119	G	A	C	C	U	A	A	C	U	C	C	U	A	G	U	C	U	C	A	G	C	U	C	U	U	U	U	C
	SAG 10.97	G	A	C	C	C	A	A	C	U	C	C	U	G	G	U	C	U	C	A	G	C	U	C	U	U	U	C	C
	SAG 2482	G	A	C	C	C	A	A	C	U	C	C	U	G	G	U	C	U	C	A	G	C	U	C	U	U	U	C	C
	ST-3	G	A	C	C	U	A	A	C	U	C	C	U	A	G	U	C	U	C	A	G	C	U	C	U	U	U	U	C
	ST-4	G	A	C	C	U	A	A	C	U	C	C	U	A	G	U	C	U	C	A	G	C	U	C	U	U	U	U	C
TRITOSTICHOCOCCUS (5)	SAG 2406	G	G	C	C	C	A	A	C	C	U	C	C	G	G	U	C	U	C	A	G	C	G	C	U	U	-	C	C
	ST-7	G	G	C	C	C	C	A	C	U	C	C	C	G	G	U	C	U	C	A	G	C	G	C	U	U	-	U	C
	ST-6	G	G	C	C	C	C	A	C	U	C	C	C	G	G	U	C	U	C	A	G	C	G	C	U	U	-	C	C
	ST-8	G	G	C	C	C	C	A	C	U	C	C	C	G	G	U	C	U	C	A	G	C	G	C	U	U	U	C	C
	ST-9	G	G	C	C	C	C	A	C	U	C	C	C	G	G	U	C	U	C	A	G	C	G	C	U	C	-	C	C
	ST-2	G	G	C	U	C	A	A	C	U	C	U	C	G	A	A	C	U	C	A	G	C	U	C	A	U	-	C	C
DIPLOSPHAERA (4)	SAG 11.88	G	G	C	C	C	A	A	U	U	C	C	U	G	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
	SAG 48.86	G	G	C	C	C	A	A	U	U	C	C	U	G	G	U	A	U	C	A	G	C	U	C	U	U	-	C	C
	SAG 49.86	G	G	C	C	C	A	A	U	U	C	C	U	G	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
	SAG 2.82	G	G	C	C	C	A	A	U	U	C	C	U	G	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
	SAG 9.82	G	G	C	C	C	A	A	U	U	C	C	U	G	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
	SAG 2049	G	G	C	C	C	A	A	U	U	C	C	U	G	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
TETRATOSTICHOCOCCUS (2)	SAG 2138	G	A	C	C	C	A	A	U	U	C	C	U	G	G	U	C	U	C	A	G	C	U	C	U	U	-	C	C
PSEUDOSTICHOCOCCUS (8)	SAG 379-4	G	G	C	C	C	C	A	C	U	C	C	C	G	G	U	C	U	U	A	G	C	U	C	U	C	-	C	C
	SAG 380-1	G	G	C	C	C	C	A	C	U	C	C	C	G	G	U	C	U	U	A	G	C	G	C	U	C	-	C	C
	SAG 2067	G	G	C	C	C	C	A	C	U	C	C	C	G	G	U	C	U	U	A	G	C	U	C	U	C	-	U	C
	UTEX 2249	G	G	C	C	C	C	A	C	U	C	U	C	G	G	U	C	U	U	A	C	C	U	C	U	C	-	U	C
	CBC	-	-	-	-	*	-	-	-	-	-	-	*	-	-	-	*	-	*	-	*	-	-	-	-	-	-	-	
	HCBC	-	-	-	*	-	-	-	-	*	*	*	*	-	*	-	-	-	-	-	-	-	-	*	-	-	*	-	
	NHS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*	-	*	*	*	-	-	-	-	
STICHOCOCCUS																													
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