

**Supplementary Table S4.** The occurrence of *groEL* and *groES* genes in 24 sequenced myxobacterial genomes.

strain	locus_tag	name	strand	accession
<i>Anaeromyxobacter dehalogenans</i> 2CP-1	A2CP1_RS07860	<i>groEL2</i>	+	WP_012632845.1
<i>Anaeromyxobacter dehalogenans</i> 2CP-1	A2CP1_RS18815	<i>groES</i>	+	WP_011422641.1
<i>Anaeromyxobacter dehalogenans</i> 2CP-1	A2CP1_RS18820	<i>groEL1</i>	+	WP_015934824.1
<i>Anaeromyxobacter dehalogenans</i> 2CP-C	ADEH_RS12380	<i>groEL2</i>	-	WP_011421446.1
<i>Anaeromyxobacter dehalogenans</i> 2CP-C	ADEH_RS18565	<i>groES</i>	+	WP_011422641.1
<i>Anaeromyxobacter dehalogenans</i> 2CP-C	ADEH_RS18570	<i>groEL1</i>	+	WP_011422642.1
<i>Anaeromyxobacter</i> sp. Fw109-5	ANAE109_RS07500	<i>groEL2</i>	+	WP_011985785.1
<i>Anaeromyxobacter</i> sp. Fw109-5	ANAE109_RS19060	<i>groES</i>	+	WP_012098520.1
<i>Anaeromyxobacter</i> sp. Fw109-5	ANAE109_RS19065	<i>groEL1</i>	+	WP_012098521.1
<i>Anaeromyxobacter</i> sp. K	ANAEK_RS07370	<i>groEL2</i>	+	WP_012525521.1
<i>Anaeromyxobacter</i> sp. K	ANAEK_RS18410	<i>groES</i>	+	WP_011422641.1
<i>Anaeromyxobacter</i> sp. K	ANAEK_RS18415	<i>groEL1</i>	+	WP_012527640.1
<i>Archangium gephyra</i> DSM 2261	AA314_RS19345	<i>groEL1</i>	-	WP_047856671.1
<i>Archangium gephyra</i> DSM 2261	AA314_RS19350	<i>groES</i>	-	WP_043396073.1
<i>Archangium gephyra</i> DSM 2261	AA314_RS21800	<i>groEL2</i>	+	WP_047857048.1
<i>Chondromyces apiculatus</i> DSM 436	CAP_RS19785	<i>groEL</i>	-	WP_044243374.1
<i>Chondromyces apiculatus</i> DSM 436	CAP_RS19790	<i>groES</i>	-	WP_044243376.1
<i>Chondromyces apiculatus</i> DSM 436	CAP_RS00265	<i>groEL</i>	-	WP_044234642.1
<i>Chondromyces apiculatus</i> DSM 436	CAP_RS00270	<i>groES</i>	-	WP_044234644.1
<i>Chondromyces crocatus</i> Cm c5	CMC5_RS18270	<i>groES</i>	+	WP_050431631.1
<i>Chondromyces crocatus</i> Cm c5	CMC5_RS18275	<i>groEL</i>	+	WP_050431632.1
<i>Chondromyces crocatus</i> Cm c5	CMC5_RS36310	<i>groES</i>	+	WP_050434698.1
<i>Chondromyces crocatus</i> Cm c5	CMC5_RS36315	<i>groEL</i>	+	WP_050434699.1
<i>Corallococcus coralloides</i> DSM 2259	COCOR_RS12630	<i>groEL1</i>	-	WP_014395361.1
<i>Corallococcus coralloides</i> DSM 2259	COCOR_RS12635	<i>groES</i>	-	WP_014395362.1
<i>Corallococcus coralloides</i> DSM 2259	COCOR_RS16530	<i>groEL2</i>	+	WP_014396128.1
<i>Cystobacter fuscus</i> DSM 2262	D187_RS22520	<i>groEL1</i>	-	WP_043431189.1
<i>Cystobacter fuscus</i> DSM 2262	D187_RS22525	<i>groES</i>	-	WP_002624038.1
<i>Cystobacter fuscus</i> DSM 2262	D187_RS38105	<i>groEL</i>	-	WP_002630326.1

<i>Cystobacter fuscus</i> DSM 2262	D187_RS38365	<i>groEL2</i>	+	WP_002630378.1
<i>Cystobacter violaceus</i> Cb vi76	Q664_RS39225	<i>groEL2</i>	+	WP_043408220.1
<i>Cystobacter violaceus</i> Cb vi76	Q664_RS17205	<i>groEL1</i>	-	WP_043396071.1
<i>Cystobacter violaceus</i> Cb vi76	Q664_RS17210	<i>groES</i>	-	WP_043396073.1
<i>Haliangium ochraceum</i> DSM 14365	HOCH_RS26645	<i>groES</i>	+	WP_012830442.1
<i>Haliangium ochraceum</i> DSM 14365	HOCH_RS26650	<i>groEL</i>	+	WP_012830443.1
<i>Haliangium ochraceum</i> DSM 14365	HOCH_RS32730	<i>groEL</i>	-	WP_012831647.1
<i>Haliangium ochraceum</i> DSM 14365	HOCH_RS32735	<i>groES</i>	-	WP_012831648.1
<i>Hyalangium minutum</i> DSM 14724	DB31_RS11645	<i>groEL2</i>	+	WP_044186442.1
<i>Hyalangium minutum</i> DSM 14724	DB31_RS22055	<i>groES</i>	+	WP_044191117.1
<i>Hyalangium minutum</i> DSM 14724	DB31_RS22060	<i>groEL1</i>	+	WP_044191118.1
<i>Myxococcus fulvus</i> 124B02	MFUL124B02_RS27270	<i>groEL2</i>	-	WP_046714602.1
<i>Myxococcus fulvus</i> 124B02	MFUL124B02_RS29475	<i>groES</i>	+	WP_013941457.1
<i>Myxococcus fulvus</i> 124B02	MFUL124B02_RS29480	<i>groEL1</i>	+	WP_046714963.1
<i>Myxococcus fulvus</i> HW-1	LILAB_RS29980	<i>groEL2</i>	-	WP_013941070.1
<i>Myxococcus fulvus</i> HW-1	LILAB_RS31935	<i>groES</i>	+	WP_013941457.1
<i>Myxococcus fulvus</i> HW-1	LILAB_RS31940	<i>groEL1</i>	+	WP_013941458.1
<i>Myxococcus stipitatus</i> DSM 14675	MYSTI_RS24550	<i>groEL2</i>	-	WP_015350497.1
<i>Myxococcus stipitatus</i> DSM 14675	MYSTI_RS26680	<i>groES</i>	+	WP_015350918.1
<i>Myxococcus stipitatus</i> DSM 14675	MYSTI_RS26685	<i>groEL1</i>	+	WP_015350919.1
<i>Myxococcus xanthus</i> DK 1622	MXAN_RS21695	<i>groEL2</i>	-	WP_011554465.1
<i>Myxococcus xanthus</i> DK 1622	MXAN_RS23760	<i>groES</i>	+	WP_002640434.1
<i>Myxococcus xanthus</i> DK 1622	MXAN_RS23765	<i>groEL1</i>	+	WP_011554876.1
<i>Myxococcus xanthus</i> DZ2	MXDZ_RS0219785	<i>groEL2</i>	+	WP_011554465.1
<i>Myxococcus xanthus</i> DZ2	MXDZ_RS0233565	<i>groES</i>	+	WP_002640434.1
<i>Myxococcus xanthus</i> DZ2	MXDZ_RS0233570	<i>groEL1</i>	+	WP_011554876.1
<i>Myxococcus xanthus</i> DZF1	MXF1_RS0137875	<i>groEL2</i>	+	WP_011554465.1
<i>Myxococcus xanthus</i> DZF1	MXF1_RS0133640	<i>groES</i>	+	WP_002640434.1
<i>Myxococcus xanthus</i> DZF1	MXF1_RS0133645	<i>groEL1</i>	+	WP_011554876.1
<i>Plesiocystis pacifica</i> SIR-1	PPSIR1_RS03005	<i>groEL</i>	-	WP_006969504.1
<i>Plesiocystis pacifica</i> SIR-1	PPSIR1_RS03010	<i>groES</i>	-	WP_006969505.1
<i>Sandaracinus amylolyticus</i> DSM 53668	DB32_RS16520	<i>groEL</i>	-	WP_053233422.1
<i>Sandaracinus amylolyticus</i> DSM 53668	DB32_RS16525	<i>groES</i>	-	WP_053233423.1

<i>Sorangium cellulosum</i> So ce56	SCE_RS14260	<i>groES</i>	+	WP_012235412.1
<i>Sorangium cellulosum</i> So ce56	SCE_RS14265	<i>groEL</i>	+	WP_012235413.1
<i>Sorangium cellulosum</i> So ce56	SCE_RS30385	<i>groES</i>	+	WP_012238539.1
<i>Sorangium cellulosum</i> So ce56	SCE_RS30390	<i>groEL</i>	+	WP_012238540.1
<i>Sorangium cellulosum</i> So0157-2	SCE1572_RS17550	<i>groES</i>	+	WP_020735364.1
<i>Sorangium cellulosum</i> So0157-2	SCE1572_RS17555	<i>groEL</i>	+	WP_020735365.1
<i>Sorangium cellulosum</i> So0157-2	SCE1572_RS36395	<i>groES</i>	+	WP_020738934.1
<i>Sorangium cellulosum</i> So0157-2	SCE1572_RS36400	<i>groEL</i>	+	WP_020738935.1
<i>Sorangium cellulosum</i> So0157-2	SCE1572_RS37890	<i>groEL</i>	+	WP_020739228.1
<i>Stigmatella aurantiaca</i> DW4/3-1	STAUR_RS23745	<i>groEL2</i>	-	WP_002615259.1
<i>Stigmatella aurantiaca</i> DW4/3-1	STAUR_RS27970	<i>groES</i>	+	WP_002615502.1
<i>Stigmatella aurantiaca</i> DW4/3-1	STAUR_RS27975	<i>groEL1</i>	+	WP_013376916.1
<i>Vulgatibacter incomptus</i> DSM 27710	AKJ08_RS08640	<i>groES</i>	+	WP_050725696.1
<i>Vulgatibacter incomptus</i> DSM 27710	AKJ08_RS08645	<i>groEL</i>	+	WP_050725697.1