

Table S1. Enzymatic activities in starved and mucus-treated cultures

Enzyme	Strain			Strain			Strain			Strain		
	<i>S. marcescens</i> PDL100			<i>S. marcescens</i> MG1			<i>S. marcescens</i> ATCC 39006			<i>S. marcescens</i> ATCC 43422		
	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus
α -D-Galactopyranosidase	1.09 ± 0.03	0.37 ± 0.40^a	1.99 ± 1.05	0.123 ± 0.01	78.81 ± 22.51	8.21 ± 3.76	120.13 ± 27.50	591.53 ± 62.78	1933.42 ± 424.7	0.70 ± 0.05	5.55 ± 0.55	0.45 ± 0.24
β -D-Galactopyranosidase	14.95 ± 0.15	18.10 ± 1.45	18.16 ± 2.95	2.00 ± 0.10	63.98 ± 13.43	23.56 ± 9.39	53.55 ± 4.73	191.30 ± 32.05	638.44 ± 151.13	8.56 ± 0.44	7.96 ± 1.21	23.14 ± 7.77
α -D-Glucopyranosidase	214.43 ± 0.95	230.47 ± 16.71	175.01 ± 24.79	38.53 ± 1.57	119.80 ± 32.44	148.41 ± 53.77	9.93 ± 0.16	30.71 ± 5.90	122.16 ± 20.23	164.61 ± 9.88	123.09 ± 6.19	88.85 ± 7.96
β -D-Glucopyranosidase	1.41 ± 0.06	0.18 ± 1.07	1.52 ± 0.39	0.27 ± 0.02	76.48 ± 15.60	8.14 ± 3.73	293.93 ± 8.39	732.64 ± 86.99	2694.80 ± 449.9	3.11 ± 0.34	3.09 ± 0.25	5.04 ± 0.93
α -D-Xylopyranosidase	1.36 ± 0.09	0.15 ± 0.10	0.41 ± 0.09	0.04 ± 0.017	29.53 ± 6.09	0.64 ± 0.59	1.51 ± 0.06	22.95 ± 3.57	13.46 ± 2.62	0.59 ± 0.01	1.93 ± 0.04	0.256 ± 0.05
β -D-Xylopyranosidase	0.90 ± 0.18	1.69 ± 0.44	0.50 ± 0.45	0.02 ± 0.04	161.14 ± 35.811	16.4 ± 9.5	26.01 ± 6.83	70.73 ± 12.61	272.77 ± 92.21	1.80 ± 0.36	13.12 ± 1.23	0.85 ± 0.21
α -L-Arabinopyranosidase	17.73 ± 0.04	19.90 ± 1.56	15.81 ± 2.24	2.517 ± 0.11	31.04 ± 10.32	13.04 ± 4.87	28.96 ± 4.14	98.41 ± 19.05	316.59 ± 73.32	10.65 ± 0.43	8.34 ± 0.57	5.43 ± 0.46
β -L-Arabinopyranosidase	1.21 ± 0.14	0.11 ± 0.14	0.48 ± 0.13	0.01 ± 0.00	30.46 ± 4.80	0.56 ± 0.45	1.59 ± 0.05	24.14 ± 3.72	20.36 ± 3.21	0.76 ± 0.03	1.93 ± 0.31	0.60 ± 0.01
α -L-Fucopyranosidase	0.90 ± 0.02	9.14 ± 1.70^b	9.88 ± 0.25	0.05 ± 0.00	294.59 ± 61.72	11.10 ± 0.14	0.80 ± 0.02	1.87 ± 3.09	1.50 ± 1.10	0.69 ± 0.07	26.26 ± 0.64	11.18 ± 0.48
β -D-Fucopyranosidase	1.16 ± 0.04	0.26 ± 0.39	0.75 ± 0.24	0.10 ± 0.02	45.08 ± 9.21	1.31 ± 0.86	8.24 ± 1.07	40.26 ± 7.09	92.81 ± 20.66	1.08 ± 0.02	2.54 ± 0.09	1.40 ± 0.50
N-Acetyl- β -D-Galactosaminidase	215.67 ± 2.27	228.62 ± 15.49	168.81 ± 24.17	39.67 ± 1.62	168.28 ± 41.95	140.88 ± 53.62	2.99 ± 0.13	34.19 ± 4.73	96.21 ± 32.12	112.13 ± 3.99	87.12 ± 3.07	70.72 ± 2.06
β -D-Glucuronidase	0.71 ± 0.14	0.33 ± 0.13	0.36 ± 0.16	0.01 ± 0.00	25.56 ± 5.57	0.51 ± 0.63	1.38 ± 0.04	26.89 ± 3.06	17.99 ± 2.85	0.73 ± 0.01	1.36 ± 0.02	0.17 ± 0.05

Enzyme	Strain			Strain			Strain			Strain		
	<i>S. marcescens</i> 43820			<i>S. marcescens</i> EL31			<i>S. marcescens</i> EL34			<i>S. marcescens</i> EL139		
	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus
α -D-Galactopyranosidase	0.50 ± 0.02	6.03 ± 0.57	0.39 ± 0.14	1.03 ± 0.03	3.35 ± 4.40	19.83 ± 0.48	1.98 ± 0.10	4.13 ± 0.36	8.81 ± 0.84	1.12 ± 0.26	4.57 ± 0.25	3.247 ± 0.86
β -D-Galactopyranosidase	7.24 ± 0.44	16.39 ± 3.72	17.77 ± 0.92	6.78 ± 0.31	3.17 ± 0.09	30.51 ± 1.47	12.87 ± 0.39	2.78 ± 0.41	12.44 ± 1.31	11.22 ± 0.31	6.43 ± 0.23	11.75 ± 1.17
α -D-Glucopyranosidase	120.83 ± 2.00	75.01 ± 10.79	83.61 ± 3.76	96.50 ± 3.20	90.43 ± 0.84	119.66 ± 4.07	106.97 ± 0.54	53.82 ± 0.97	59.31 ± 2.07	161.53 ± 3.46	107.28 ± 3.26	62.32 ± 9.63
β -D-Glucopyranosidase	2.27 ± 0.25	2.54 ± 0.01	7.95 ± 0.19	1.19 ± 0.04	3.62 ± 0.20	3.89 ± 0.30	3.33 ± 0.14	5.21 ± 0.02	2.09 ± 0.30	1.99 ± 0.15	4.46 ± 0.08	5.46 ± 1.65
α -D-Xylopyranosidase	0.90 ± 0.43	2.00 ± 0.05	0.55 ± 0.02	1.05 ± 0.26	1.33 ± 0.26	0.70 ± 0.00	0.80 ± 0.01	1.78 ± 0.07	0.58 ± 0.01	1.22 ± 0.03	1.35 ± 0.02	0.81 ± 0.01
β -D-Xylopyranosidase	1.46 ± 0.14	12.15 ± 1.25	2.64 ± 0.27	0.78 ± 0.13	14.00 ± 1.30	3.25 ± 0.36	0.73 ± 0.02	13.78 ± 1.30	2.97 ± 0.33	0.87 ± 0.03	13.44 ± 1.17	3.08 ± 0.34
α -L-Arabinopyranosidase	9.83 ± 0.43	7.17 ± 1.67	7.84 ± 0.58	10.15 ± 0.57	10.01 ± 0.76	11.15 ± 0.42	9.23 ± 0.10	1.69 ± 0.55	1.82 ± 0.23	16.69 ± 0.50	14.04 ± 1.12	9.16 ± 0.47
β -L-Arabinopyranosidase	0.52 ± 0.01	1.95 ± 0.30	0.52 ± 0.05	0.79 ± 0.11	1.03 ± 0.31	0.07 ± 0.03	0.35 ± 0.00	2.10 ± 0.31	0.21 ± 0.01	0.83 ± 0.01	1.80 ± 0.32	0.56 ± 0.02
α -L-Fucopyranosidase	0.466 ± 0.03	26.42 ± 0.65	10.72 ± 0.53	7.29 ± 0.72	19.63 ± 0.54	11.38 ± 0.58	0.29 ± 0.00	26.52 ± 0.66	11.23 ± 0.55	0.83 ± 0.19	26.20 ± 0.65	11.15 ± 0.56
β -D-Fucopyranosidase	0.90 ± 0.14	2.40 ± 0.06	0.10 ± 0.03	1.280 ± 0.21	1.80 ± 0.10	2.26 ± 0.12	1.92 ± 0.12	2.76 ± 0.10	1.48 ± 0.09	1.58 ± 0.07	2.29 ± 0.09	1.13 ± 0.12
N-Acetyl- β -D-Galactosaminidase	125.49 ± 5.63	84.38 ± 2.11	161.46 ± 2.78	90.11 ± 5.15	74.36 ± 1.45	134.62 ± 3.14	108.20 ± 0.71	68.13 ± 0.02	89.55 ± 4.71	116.36 ± 1.83	80.35 ± 1.26	48.70 ± 3.62
β -D-Glucuronidase	0.55 ± 0.05	1.62 ± 0.06	0.13 ± 0.04	0.73 ± 0.04	1.31 ± 0.04	0.03 ± 0.04	0.49 ± 0.01	1.43 ± 0.02	0.03 ± 0.01	1.08 ± 0.01	1.14 ± 0.06	0.48 ± 0.01

Enzyme	Strain			Strain			Strain			Strain		
	<i>S. marcescens</i> EL202			<i>S. marcescens</i> EL206			<i>S. marcescens</i> EL266			<i>S. marcescens</i> EL368		
	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus
α -D-Galactopyranosidase	0.54 ± 0.03	2.06 ± 0.48	3.40 ± 0.46	0.62 ± 0.05	2.01 ± 0.50	2.45 ± 0.02	0.68 ± 0.01	0.83 ± 0.36	1.21 ± 0.69	0.53 ± 0.02	1.62 ± 0.44	0.12 ± 0.02
β -D-Galactopyranosidase	9.83 ± 0.68	6.80 ± 0.14	17.72 ± 1.07	1.06 ± 0.12	1.99 ± 0.02	4.64 ± 0.24	0.34 ± 0.60	0.10 ± 0.31	0.28 ± 0.12	8.75 ± 0.48	2.96 ± 0.06	10.44 ± 0.20
α -D-Glucopyranosidase	102.30 ± 6.60	57.79 ± 3.10	27.65 ± 1.25	1.21 ± 0.24	13.42 ± 0.42	3.53 ± 0.16	0.42 ± 0.03	11.42 ± 0.23	5.31 ± 0.02	119.46 ± 2.89	83.66 ± 0.18	130.12 ± 2.56
β -D-Glucopyranosidase	1.07 ± 0.09	3.01 ± 0.20	2.21 ± 0.11	2.15 ± 0.26	2.77 ± 0.19	3.11 ± 0.04	0.42 ± 0.01	2.87 ± 0.02	0.37 ± 0.17	2.89 ± 0.41	1.48 ± 0.34	5.75 ± 1.26
α -D-Xylopyranosidase	0.75 ± 0.08	1.57 ± 0.08	0.94 ± 0.00	0.44 ± 0.03	1.65 ± 0.08	0.42 ± 0.00	0.27 ± 0.00	1.55 ± 0.01	0.00 ± 0.02	1.26 ± 0.04	0.91 ± 0.29	1.13 ± 0.03
β -D-Xylopyranosidase	0.98 ± 0.080	13.30 ± 1.28	2.24 ± 0.23	0.68 ± 0.04	13.87 ± 1.30	3.50 ± 0.37	0.21 ± 0.01	13.79 ± 1.26	3.69 ± 0.30	0.93 ± 0.06	12.24 ± 0.41	2.14 ± 0.30
α -L-Arabinopyranosidase	13.59 ± 2.35	10.41 ± 0.21	10.84 ± 1.03	0.48 ± 0.00	2.10 ± 0.25	1.24 ± 0.20	0.20 ± 0.01	1.70 ± 0.26	0.01 ± 0.04	11.06 ± 0.47	6.87 ± 1.58	10.28 ± 1.36
β -L-Arabinopyranosidase	0.55 ± 0.02	1.91 ± 0.32	0.65 ± 0.02	0.96 ± 0.21	2.00 ± 0.21	0.09 ± 0.03	0.21 ± 0.01	2.10 ± 0.28	0.29 ± 0.00	0.71 ± 0.03	1.98 ± 0.34	0.37 ± 0.03
α -L-Fucopyranosidase	0.53 ± 0.04	26.16 ± 0.63	9.78 ± 0.32	0.80 ± 0.24	26.06 ± 0.66	11.13 ± 0.57	0.13 ± 0.01	26.09 ± 0.65	2.31 ± 0.31	1.50 ± 0.38	17.45 ± 0.50	0.98 ± 0.26
β -D-Fucopyranosidase	1.09 ± 0.11	2.45 ± 0.13	1.35 ± 0.11	0.58 ± 0.00	3.14 ± 0.11	0.08 ± 0.02	0.22 ± 0.01	3.02 ± 0.08	0.37 ± 0.03	0.95 ± 0.03	2.65 ± 0.13	0.74 ± 0.01
N-Acetyl- β -D-Galactosaminidase	118.02 ± 8.31	108.06 ± 0.08	161.25 ± 3.46	0.82 ± 0.07	17.57 ± 0.73	9.62 ± 0.59	1.15 ± 0.20	8.50 ± 0.00	7.14 ± 0.14	122.04 ± 4.89	89.75 ± 1.29	128.19 ± 0.94
β -D-Glucuronidase	0.77 ± 0.69	1.17 ± 0.07	0.57 ± 0.01	1.03 ± 0.40	1.50 ± 0.06	0.02 ± 0.03	0.13 ± 0.02	1.46 ± 0.02	0.39 ± 0.01	1.33 ± 0.19	0.99 ± 0.07	0.59 ± 0.03

Enzyme	Strain			Strain			Strain			Strain		
	<i>S. marcescens</i> EL402			<i>P. mandapamensis</i> 33-C12			<i>H. meridiana</i> 33-E7			<i>P. leiognathi</i> 33-G12		
	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus	Starved	2 hr Mucus	18 hr Mucus
α -D-Galactopyranosidase	0.96 ± 0.07	3.96 ± 0.12	0.78 ± 0.07	1.98 ± 0.16	2.63 ± 0.26	6.75 ± 1.84	1.51 ± 0.15	3.33 ± 0.56	8.87 ± 3.00	5.41 ± 0.73	18.64 ± 4.38	44.58 ± 5.23
β -D-Galactopyranosidase	16.32 ± 2.76	6.36 ± 0.92	10.21 ± 1.28	2.22 ± 0.02	8.86 ± 1.42	21.94 ± 4.46	1.78 ± 0.16	26.15 ± 3.97	64.93 ± 19.88	3.59 ± 0.17	0.34 ± 0.77	25.25 ± 5.65
α -D-Glucopyranosidase	145.15 ± 16.6	109.66 ± 7.37	120.37 ± 18.26	1.70 ± 0.01	11.44 ± 2.02	26.67 ± 6.89	163.49 ± 19.50	199.29 ± 7.95	188.00 ± 14.42	3.95 ± 0.53	13.47 ± 0.03	2.51 ± 0.09
β -D-Glucopyranosidase	3.13 ± 0.54	0.45 ± 0.59	10.22 ± 1.29	12.49 ± 0.06	9.81 ± 0.76	61.43 ± 19.09	12.39 ± 1.07	14.08 ± 0.60	35.83 ± 3.54	3.72 ± 0.19	2.91 ± 0.51	11.13 ± 0.45
α -D-Xylopyranosidase	2.04 ± 0.11	0.71 ± 0.09	0.74 ± 0.06	1.42 ± 0.00	1.07 ± 0.01	2.49 ± 0.32	1.38 ± 0.16	0.91 ± 0.10	2.01 ± 0.34	1.15 ± 0.23	2.24 ± 0.02	2.54 ± 0.01
β -D-Xylopyranosidase	2.06 ± 0.03	12.06 ± 1.17	1.22 ± 0.24	4.92 ± 0.45	3.49 ± 0.89	19.49 ± 1.21	10.68 ± 0.88	1.48 ± 0.80	0.97 ± 0.13	1.00 ± 0.05	14.24 ± 1.26	1.47 ± 0.26
α -L-Arabinopyranosidase	25.80 ± 5.27	18.68 ± 1.47	11.36 ± 2.02	1.47 ± 0.05	1.20 ± 0.22	2.31 ± 0.30	1.34 ± 0.10	1.02 ± 0.22	3.51 ± 0.56	1.47 ± 0.10	2.39 ± 0.19	4.86 ± 0.23
β -L-Arabinopyranosidase	1.49 ± 0.45	1.64 ± 0.25	0.60 ± 0.09	1.77 ± 0.01	1.02 ± 0.23	2.60 ± 0.14	1.52 ± 0.14	0.89 ± 0.24	2.98 ± 0.14	1.98 ± 0.16	2.06 ± 0.22	6.90 ± 0.00
α -L-Fucopyranosidase	2.45 ± 0.27	15.04 ± 0.12	2.95 ± 0.33	1.53 ± 0.01	25.48 ± 0.59	7.90 ± 0.01	1.28 ± 0.25	25.73 ± 0.60 </				