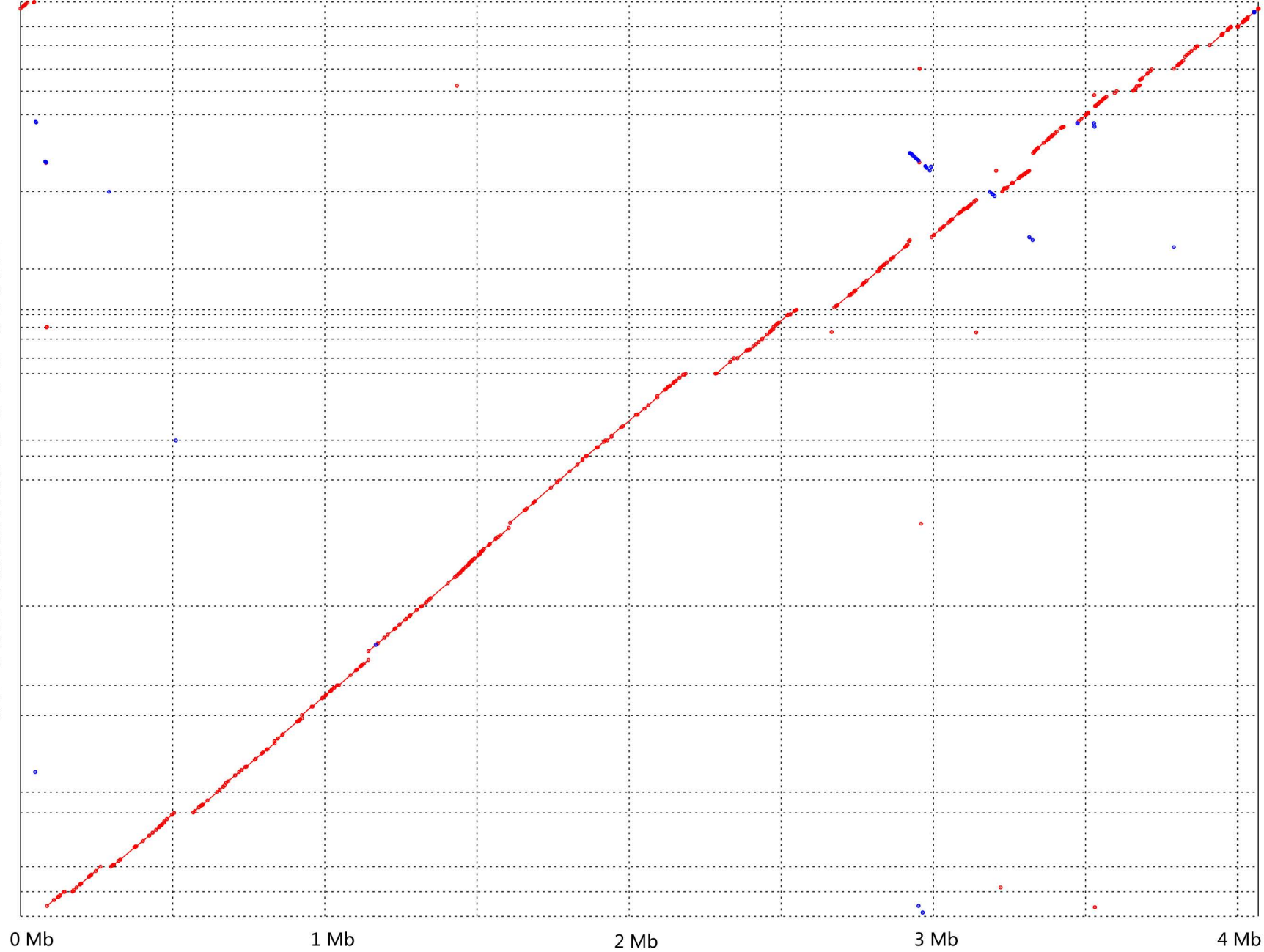


M. odoratimimus CCUG 39352



M. profundus D25

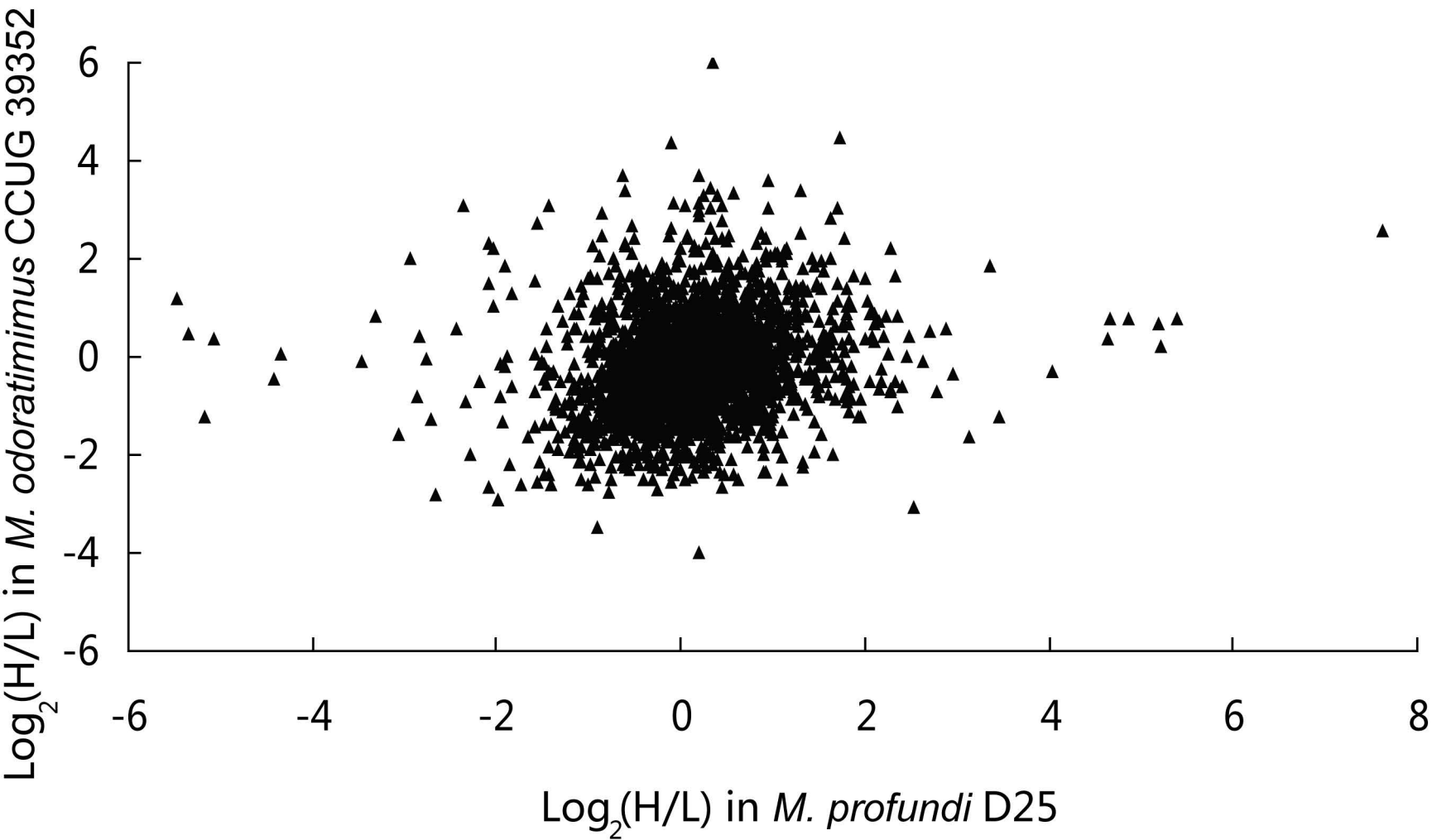


Table S1. Information of genes within the exopolysaccharide gene cluster

Locus tag	Annotation	RPKM at 1/4X seawater	RPKM at 1X seawater	Origin
MPR_2125	transposase	24.1	24.1	vertically inherited
MPR_2126	acetyltransferase	7.8	7.8	HGT
MPR_2127	glycerol-3-phosphate cytidylyltransferase	53.8	53.8	vertically inherited
MPR_2128	putative hydrolase of the HAD superfamily	296.1	296.1	HGT
MPR_2129	carbamoyl-phosphate synthase large subunit	400.4	400.4	HGT
MPR_2130	UDP-galactose phosphate transferase	389.3	389.3	HGT
MPR_2131	acetyltransferase	435.8	435.8	HGT
MPR_2132	capsular polysaccharide biosynthesis protein	44	44	HGT
MPR_2133	glycosyltransferase	176.1	176.1	HGT
MPR_2134	oligosaccharide repeat unit polymerase Wzy	16.3	16.3	HGT
MPR_2135	hypothetical protein	130.1	130.1	HGT
MPR_2136	polysaccharide transporter, PST family	72.5	72.5	HGT
MPR_2137	UDP-N-acetyl-D-galactosamine dehydrogenase	327.7	327.7	vertically inherited
MPR_2138	acyltransferase	63.2	63.2	vertically inherited
MPR_2139	UDP-N-acetylglucosamine 4-epimerase	223.5	223.5	vertically inherited
MPR_2140	hypothetical protein	52	52	HGT
MPR_2141	transposase	0	0	vertically inherited

Table S2. Information of the genes that are up-regulated more than 4 times at high salinity condition.

Locus tag	Annotation	Up-regulated times
MPR_3295	trimethylamine monooxygenase	198.5
MPR_1689	amino acid racemase	41.8
MPR_0118	magnesium transporter	37.1
MPR_2560	hypothetical protein	36.7
MPR_1690	GNAT family acetyltransferase	28.9
MPR_0427	universal stress protein UspA	25.4
MPR_0426	choline/glycine/proline betaine transport protein	24.8
MPR_2561	hypothetical protein	16.5
MPR_2213	cold-shock protein	10.9
MPR_1502	carbonic anhydrase	10.2
MPR_1500	hypothetical protein	8.7
MPR_1873	glycan metabolism protein	8
MPR_2556	flagellar motor protein MotB	7.8
MPR_0151	hypothetical protein	7.4
MPR_1268	hypothetical protein	6.8
MPR_1871	hypothetical protein	6.6
MPR_1066	DNA mismatch repair protein MutS2	6.6
MPR_0903	chloride channel protein	6.5
MPR_1269	hypothetical protein	6.1
MPR_0591	membrane protein	5.7
MPR_2201	myroilysin precursor	5.6
MPR_2595	hypothetical protein	5.4
MPR_2563	hypothetical protein	5.2
MPR_1874	carbohydrate-binding protein SusC	5.2
MPR_1270	TonB-dependent receptor	5.1
MPR_0486	peptidase M16	5
MPR_0515	hypothetical protein	5
MPR_1603	lysine-specific permease	5
MPR_0744	hypothetical protein	5
MPR_0307	O-acetylhomoserine (thiol)-lyase	4.8
MPR_2439	GCN5 family acetyltransferase	4.8
MPR_3438	HlyD family secretion protein	4.8
MPR_3186	hypothetical protein	4.7
MPR_1457	MarR family transcriptional regulator	4.7
MPR_0964	catalase	4.5
MPR_0995	TonB-dependent receptor	4.5
MPR_1422	multidrug resistance protein A	4.5
MPR_0662	zinc protease	4.5
MPR_0664	hypothetical protein	4.4
MPR_0122	hypothetical protein	4.4
MPR_2200	hypothetical protein	4.3

MPR_0833	hypothetical protein	4.3
MPR_1429	acetyltransferase	4.2
MPR_0487	peptidase M16	4.2
MPR_0463	TonB-dependent receptor	4.2
MPR_0663	hypothetical protein	4.2
MPR_0894	ABC-type transport system involved in multi-copper enzyme maturation, permease component	4.1
MPR_2229	hypothetical protein	4.1
MPR_0889	hypothetical protein	4.1
