

Suppl. Table S4. The Mur regulon in alpha-proteobacteria

Locus ID	Operon	Positio	Score	site	Function
<b><i>Sinerhizobium meliloti</i></b>					
SMc02509	<i>sitABCD</i>	-81	5.38	gTTGCAAATGcTTctCAtT	Manganese ABC transporter
<b><i>Mesorhizobium sp. BNC1</i></b>					
MBNC03003615	<i>mntH</i>	-39	5.22	AaTGCAAATaAgTcGCAAac	Manganese permease
MBNC03001420	<i>sitABCD</i>	-114	5.73	gTTGCAAATGgTTTGCAAT	Manganese ABC transporter
<b><i>Rhizobium leguminosarum</i></b>					
RL0940	<i>mntH</i>	-67	5.66	gTTGCgAATGAcTTGCAtT	Manganese permease
RL3884	<i>sitABCD</i>	-139	<u>4.65</u>	gTTGCAATTCATTcttAAT	Manganese ABC transporter
		-85	5.37	tTTGCAAATCATTctgAAT	
<b><i>Rhizobium etli</i></b>					
RHE_CH00878	<i>mntH</i>	-67	5.66	gTTGCgAATGAcTTGCAtT	Manganese permease
<b><i>Agrobacterium tumefaciens</i></b>					
AGR_L_798	<i>sitABCD</i>	-77	6.01	ATTGagAATGATTTGCAAT	Manganese ABC transporter
		-25	<u>4.84</u>	ATTGCgAgTtAaTcGCAAac	
AGR_C_3186	<i>mntH</i>	9	5.66	taTGagAATGATTTGCAAT	Manganese permease
<b><i>Brucella melitensis</i></b>					
BMEI0569	<i>mntH</i>	-43	5.29	AaTGCAAATagTTTGCAAac	Manganese permease
BMEI1563	<i>irr1</i>	-201	5.90	ATTGCAAACATTGCAAT	iron regulatory protein Irr
<b><i>Bartonella quintana</i></b>					
BQ00790	<i>sitABCD</i>	-34	5.82	AaTGCAAATCATTgGCAAT	Manganese ABC transporter
<b><i>Bradyrhizobium japonicum</i></b>					
blr5044	<i>mntH</i>	-45	5.74	gTTGCAAATGAgTTGCAAT	Manganese permease
blI0768	<i>irr1</i>	-78	<u>4.34</u>	gTTGCgAgaaAcTTGCAtc	iron regulatory protein Irr
<b><i>Bradyrhizobium sp. BTAi1</i></b>					
Brad_4860	<i>mntH1</i>	-46	5.12	cTTGCAAATaAgTTGCAtT	Manganese permease
<b><i>Rhodopseudomonas palustris</i></b>					
RPA2706	<i>mntH</i>	-48	5.70	ATTGCAAATGAcTTGCAAag	Manganese permease
RPA0424	<i>irr1</i>	-84	<u>4.33</u>	gTTGCgAAgCgcTTGCAcc	iron regulatory protein Irr
<b><i>Nitrobacter winogradskyi</i></b>					
Nwi_1912	<i>mntH</i>	-52	5.7	tTTGCAAATGAgTTGCAAT	Manganese permease
Nwi_0035	<i>irr</i>	-96	<u>4.6</u>	gTTGCgAAaaAcTTGCAtc	iron regulatory protein Irr
<b><i>Nitrobacter hamburgensis X14</i></b>					
Nham_0774	<i>mntH</i>	-49	5.09	tTTGCAAAGTGAgTTGCAAag	Manganese permease
Nham_1013	<i>irr</i>	-88	<u>4.6</u>	gTTGCgAAaaAcTTGCAtc	iron regulatory protein Irr
<b><i>Rhodobacter sphaeroides</i></b>					
RSP_0904	<i>sitABCD</i>	-8	5.22	tTTGCgAATGccTcGCAtT	Manganese ABC transporter
<b><i>Silicibacter pomeroyi</i></b>					
SPO3366	<i>sitABCD</i>	-83	5.28	cTTGCgAATaATTctCAAT	Manganese ABC transporter
		-52	5.00	gTTGCgAATGgTTctCAta	
SPOA0445	<i>irr</i>	-77	<u>4.13</u>	gaTGagAATGAaaTtCAtT	iron regulatory protein Irr
<b><i>Silicibacter sp. TM1040</i></b>					
TM1040_0098	<i>sitABCD</i>	-96	<u>4.49</u>	tgTGagAATaATTctCAtT	Manganese ABC transporter
		-65	<u>4.68</u>	gTTGCgAAgCgTTctCAta	
TM1040_0183	<i>irr</i>	-74	<u>4.52</u>	tTTGCAAATCcgTTtgAAa	iron regulatory protein Irr
<b><i>Jannaschia sp. CC51</i></b>					
Jann_2080	<i>sitABCD</i>	-87	5.01	tTTGCAAcTCAcTcGCAAag	Manganese ABC transporter
Jann_1136	<i>irr</i>	43	<u>4.61</u>	tTTGCAAAGaccTcGCAAaa	iron regulatory protein Irr
<b><i>Sulfitobacter sp. EE-36</i></b>					
EE36_12418	<i>sitABCD</i>	-111	4.96	taTGCgAcTaATTcGCAtT	Manganese ABC transporter
<b><i>Rhodobacterales bacterium HTCC2654</i></b>					
RB2654_19543	<i>sitABCD</i>	-166	5.57	gTTGCAAATGATTTGCAcT	Manganese ABC transporter
		-118	5.31	gTTGCAATTCATTcGCAAac	
<b><i>Loktanella vestfoldensis SKA53</i></b>					
SKA53_08116	<i>sitABCD</i>	-64	4.89	gTTGCgAAcGcTTctCAtT	Manganese ABC transporter

**Roseobacter sp. MED193**

MED193_12968	<b>sitABCD</b>	-86	5.1	gTTGagAATaATTctCAtT	Manganese ABC transporter
		-55	<u>4.78</u>	gTTGagAATCgTTctCAta	
MED193_17849	<i>irr</i>	-41	4.94	AaTGCAAtTCATTcGCAgT	iron regulatory protein Irr
<b>Roseovarius sp.217</b>					
ROS217_05129	<b>sitABCD</b>	-27	5.11	gTTGCgAATaATTctCAta	Manganese ABC transporter
<b>Roseovarius nubinhibens ISM</b>					
ISM_02005	<i>mntX*</i>	-30	5.63	ATTGagAATaATTcGCAAT	predicted Mn transporter
<b>Oceanicola granulosus HTCC2516</b>					
OG2516_13601	<i>mntX*</i>	-38	5.85	ATTGCgAATtATTcGCAAT	predicted Mn transporter
<b>Oceanicola batsensis HTCC2597</b>					
OB2597_13568	<b>sitABCD</b>	-92	5.43	gTTGCgAATGgTTcGCAtT	Manganese ABC transporter
		-61	5.26	gTTGCgAATGgTTcGCAtc	