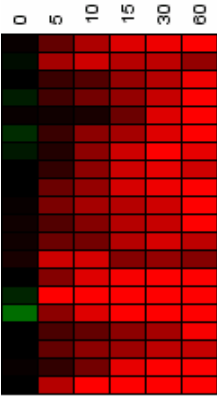
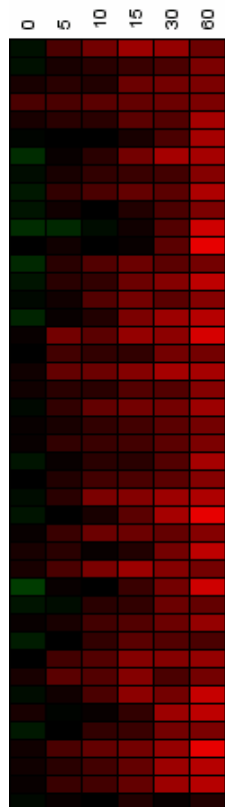


CLUSTER G



SMa1077	Nex18 Symbiotically induced conserved protein
SMb20560	Conserved Hypothetical protein
SMb20949	exoV Putative pyruvyltransferase protein
SMb20954	exoH succinyltransferase protein
SMb20960	exoN UDPglucose pyrophosphorylase protein
SMc00062	Hypothetical protein
SMc00611	IpiA Transmembrane protein
SMc01505	Hypothetical protein
SMc01580	Hypothetical transmembrane protein
SMc01765	Hypothetical transmembrane protein
SMc01855	Hypothetical transmembrane protein
SMc01904	clpX Probable ATP-dependent CLP Protease ATP-binding subunit protein
SMc02052	Conserved Hypothetical protein
SMc02156	Conserved Hypothetical protein
SMc02365	degP1 Protease precursor protein
SMc02366	Putative transcription regulator protein
SMc02560	chvI transcriptionAL regulatorY protein
SMc02655	Hypothetical transmembrane protein
SMc04128	Putative heavy metal transporting ATPase protein
SMc04350	Putative multidrug efflux system transmembrane protein

CLUSTER H

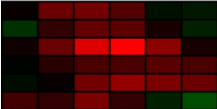


SMA0045	Cah Probable carbonic anhydrase
SMA0172	Conserved Hypothetical protein
SMA1078	Conserved Hypothetical protein
SMA1151	Conserved Hypothetical protein
SMB20359	Hypothetical protein
SMB20486	Putative sugar ABC transporter permease protein
SMB20611	dctA C4-dicarboxylate transport protein
SMB20944	exoQ Putative polysaccharide polymerase, similar to Wzy protein
SMB20946	exoY galactosyltransferase protein
SMB20955	exoK endo-beta-1,3-1,4-glycanase protein
SMB21440	Hypothetical protein
SMB21491	Hypothetical exported protein
SMB21516	Conserved Hypothetical protein
SMB21690	exoW glucosyltransferase protein
SMc00045	cycF Putative Cytochrome C signal peptide protein
SMc00063	Hypothetical transmembrane protein
SMc00103	dhe Putative Alpha-halocarboxylic acid dehalogenase protein
SMc00186	Putative ABC transporter ATP-binding transmembrane protein
SMc00346	Hypothetical transmembrane protein
SMc00610	Conserved Hypothetical protein
SMc01225	Putative transcription regulator protein
SMc01341	Hypothetical/unknown protein
SMc01428	cspA2 Probable cold shock transcription regulator protein
SMc01556	Conserved Hypothetical protein
SMc01764	ate Putative arginyl-tRNA protein transferase
SMc01769	Hypothetical protein
SMc01774	Hypothetical transmembrane protein
SMc01905	lon Probable ATP-dependent Protease LA protein
SMc02078	exoR Exopolysaccharide biosynthesis regulatorY protein
SMc02187	Putative Integrase DNA protein
SMc02278	Hypothetical unknown transmembrane protein
SMc02382	Conserved Hypothetical protein
SMc02491	Hypothetical protein
SMc03780	Hypothetical protein
SMc03783	ctpA Putative Carboxy-terminal processing protease precursor signal peptide protein
SMc03900	ndvA Beta-1-->2Glucan export ATP-binding protein
SMc03999	Hypothetical protein
SMc04167	Putative Hlistidine-rich transporter transmembrane protein
SMc04246	Hypothetical transmembrane signal peptide protein
SMc04267	IpsS LPS sulfotransferase
SMc04459	ftsH Probable metalloprotease transmembrane protein
SMc04461	ToIB protein precursor
SMc04865	Hypothetical protein

CLUSTER I

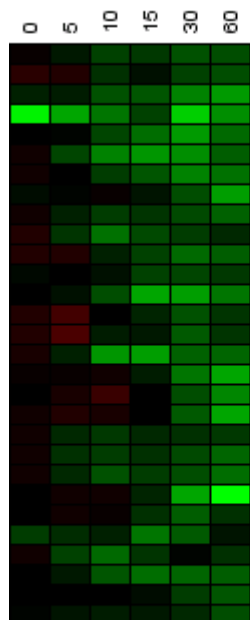


0 5 10 15 30 60



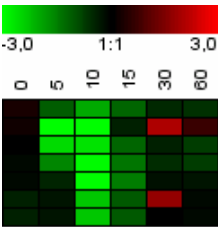
SMa1220	FixN1 Heme b / copper cytochrome c oxidase subunit
SMa1243	Azu1 pseudoazurin (blue copper protein)
SMc00641	serA Putative D-3-phosphoglycerate dehydrogenase protein
SMc01226	Putative transcription regulator protein
SMc02202	Hypothetical protein
SMc03290	Hypothetical protein

CLUSTER J



SMa0392	ABC transporter, periplasmic solute-binding protein
SMB20325	ThuE probable trehalosemaltose-binding protein
SMB20497	lyx Putative L-xylulose kinase protein
SMB20988	Conserved Hypothetical protein
SMB21176	phoD phosphate uptake ABC transporter periplasmic solute-binding protein precursor
SMB21177	phoC phosphate uptake ABC transporter ATP-binding protein
SMc00094	betB Betaine aldehyde dehydrogenase BADH oxireductase NAD protein
SMc00159	Hypothetical signal peptide protein
SMc00638	Putative heat resistant agglutinin 1 protein
SMc02145	Hypothetical signal peptide protein
SMc02146	Putative Phosphate-binding periplasmic protein
SMc02396	Probable Outer membrane protein
SMc02400	Probable Outer membrane protein
SMc02479	mdh Probable Malate dehydrogenase protein
SMc02480	sucC Probable Succinyl-coA synthetase beta chain protein
SMc02582	Conserved Hypothetical protein
SMc03027	flgB flagellar basal-body rod protein
SMc03029	flfE flagellar hook-basal body complex protein
SMc03030	flgG flagellar basal-body rod protein
SMc03037	flaA flagellin A protein
SMc03038	flaB flagellin B protein
SMc03039	flaD Probable flagellin D protein
SMc03049	flgL Putative flagellar hook-associated protein
SMc03050	flaF Putative flagellin synthesis regulator protein
SMc03138	Putative Sugarkinase protein
SMc03806	glnK Probable Nitrogen regulatorY protein PII 2
SMc04009	Conserved Hypothetical protein
SMc04059	Hypothetical protein
SMc04111	cpaC1 Putative pilus assembly transmembrane protein

CLUSTER K



SMB20436	Putative nitrate transporter protein
SMB20605	Putative ureashort-chain amide or branched-chain amino acid uptake ABC transporter periplasmic solute-binding
SMB20984	nirB Putative nitrite reductase [NAD(P)H], large subunit protein
SMB20985	nirD Putative nitrite reductase [NAD(P)H], small subunit protein
SMB20986	narB Putative nitrate reductase, large subunit protein
SMB21707	Putative ureashort-chain amide or branched-chain amino acid uptake ABC transporter ATP-binding protein
SMc02634	Hypothetical transmembrane protein

CLUSTER L

