

Supplementary Table 1. Detected numbers of proteins and peptide spectral matches (PSM) in three biological replicates from Liquid chromatography-mass spectrometry experiments

Strains	1st		2nd		3rd		shared proteins in 3 biological replicates
	Protein	PSM	Protein	PSM	Protein	PSM	
Xcv	1322	72,278	1335	72,269	1375	72,020	1189
Xcv Δ scpBXv	1342	70,629	1381	70,380	1265	70,718	1141

Supplementary Table 2. Classification of highly expressed (>2 fold) protein in the wildtype using clusters of orthologous groups.

COG function	Accession	locus tag	gene function	fold change (WT/ Δ spcbXv)	p-value	included in other group
C (Energy production and conversion)	78045741	XCV0185	alcohol dehydrogenase	*		
	78046429	XCV0873	voltage-gated potassium channel beta subunit	*		
	78049155	XCV3599	C4-dicarboxylate transporter DctA	*		
E (Amino Acid metabolism and transport)	78045913	XCV0357	dihydroxy-acid dehydratase	*		
	78046606	XCV1050	sulfate ABC transporter ATP-binding protein	*		
	78047089	XCV1533	asparagine synthase	*		
	78047442	XCV1886	methylthioribulose-1-phosphate dehydratase	*		
	78048282	XCV2726	peptidase (C-terminal fragment) and partial cysteine synthase	*		
G (Carbohydrate metabolism and transport)	78046264	XCV0708	methanol dehydrogenase heavy chain (fragment) and partial	*		
	78047791	XCV2235	6-phosphogluconolactonase	*		
	78048339	XCV2783	xanthan biosynthesis acetyltransferase GumF	*		
	78048987	XCV3431	hypothetical protein	*		
H (Coenzyme metabolism)	78046453	XCV0897	dihydrofolate reductase	*		
	78046663	XCV1107	molybdenum cofactor biosynthesis protein MoaC	*		
	78047122	XCV1566	pyridoxine kinase	*		
	78047373	XCV1817	pantoate--beta-alanine ligase	*		
	78048715	XCV3159	pyridoxamine 5'-phosphate oxidase	*		
I (Lipid metabolism)	78045829	XCV0273	acyl-CoA dehydrogenase	*		
	78047028	XCV1472	1-deoxy-D-xylulose 5-phosphate reductoisomerase	*		
	78048326	XCV2770	3-oxoacyl-ACP synthase	*		
K (Transcription)	78045823	XCV0267	hypothetical protein	*		
	78046059	XCV0503	N-acetyltransferase	*		
	78046325	XCV0769	LacI family transcriptional regulator	*		
	78046497	XCV0941	LysR family transcriptional regulator	*		
	78047160	XCV1604	ArsR family transcriptional regulator	*		
	78047734	XCV2178	LysR family transcriptional regulator	*		
	78048524	XCV2968	ribonuclease activity regulator protein RraA	*		
	78048562	XCV3006	zinc uptake regulator	*		
	78049171	XCV3615	LacI family transcriptional regulator	*		
L (Replication and repair)	78049846	XCV4290	IcIR family transcriptional regulator	*		
	78045388	XCV0079	UvrD/Rep-family ATP-dependent DNA helicase	*		
	78045424	XCV0115	Cluster of Tn5044 transposase	*		
	78045856	XCV0300	ATP-dependent helicase HrpB	*		
	78047899	XCV2343	transposase	*		
	78048051	XCV2495	integration host factor subunit beta	*		
M (Cell wall/membrane/envelope biogenesis)	78048934	XCV3378	MobA/MobL family protein	*		
	78049064	XCV3508	ATP-dependent DNA helicase RecG	*		
	78045758	XCV0202	family 25 glycosyltransferase	*		
N (Cell motility)	78047973	XCV2417	UDP-glucose/GDP-mannose dehydrogenase	*		
	78049820	XCV4264	16S rRNA methyltransferase GidB	*		
O (Post-translational modification, protein turnover, chaperone functions)	78047504	XCV1948	methyl-accepting chemotaxis protein	*		T
	78045383	XCV0074	sigma-54-dependent transcriptional regulator	*		
	78046629	XCV1073	Zn-dependent protease	*		
	78046630	XCV1074	glutaredoxin	*		
	78047683	XCV2127	Cluster of ATP-dependent Clp protease subunit	*		
	78048455	XCV2899	metallopeptidase	*		
	78048549	XCV2993	extracellular serine protease	*		
P (Inorganic ion transport and metabolism)	78047344	XCV1788	AhpC/TSA family peroxiredoxin	2.13	0.045	
	78048846	XCV3290	TonB-dependent outer membrane receptor	*		
	78049001	XCV3445	bifunctional sulfate adenylyltransferase subunit I/adenylylsulfate kinase	*		
	78049031	XCV3475	ABC transporter molybdate-binding protein	*		
	78049193	XCV3637	arsenate reductase	*		
Q (Secondary Structure)	78049815	XCV4259	RND superfamily protein	*		
	78049943	XCV4387	glucan biosynthesis protein D	*		
	78049251	XCV3695	ABC transporter permease	*		
	78049287	XCV3731	maleylacetate isomerase	*		
	78049592	XCV4036	non-ribosomal peptide synthetase	*		
	78050008	XCV4452	ABC transporter substrate-binding protein	*		
S (Function unknown)	78045402	XCV0093	secreted protein	*		
	78045408	XCV0099	zeta toxin of the postsegregational killing system	*		
	78046000	XCV0444	hypothetical protein	*		
	78046151	XCV0595	malonate decarboxylase subunit delta	*		
	78046196	XCV0640	esterase	*		
	78046337	XCV0781	ribosome biogenesis GTP-binding protein YsxC	*		
	78046375	XCV0819	CedB cytotoxin-like protein	*		
	78046378	XCV0822	cell division protein MraZ	*		
	78046741	XCV1185	hypothetical protein	*		
	78047059	XCV1503	hypothetical protein	*		
	78047195	XCV1639	hypothetical protein	*		
	78047681	XCV2125	hypothetical protein	*		
	78047728	XCV2172	short chain dehydrogenase	*		
	78047911	XCV2355	hypothetical protein	*		
	78048055	XCV2499	hypothetical protein	*		
	78048074	XCV2518	hypothetical protein	*		
	78048225	XCV2669	hypothetical protein	*		
	78048285	XCV2729	hypothetical protein	*		
	78048488	XCV2932	hypothetical protein	*		
	78048642	XCV3086	hydroxylase	*		
	78048759	XCV3203	16S ribosomal RNA methyltransferase RsmE	*		
	78047205	XCV1649	hypothetical protein	3.68	0.037	
	78045283	XCV0018	putative secreted protein	*		
78045312	XCV0003	chromosome partitioning protein	*			
78045426	XCV0117	hypothetical protein	*			
78045596	XCV0040	hypothetical protein	*			
78045625	XCV0069	hypothetical protein	*			
78046966	XCV1410	hypothetical protein	*			
78047003	XCV1447	hypothetical protein	*			
78047208	XCV1652	hypothetical protein	*			
78048014	XCV2458	hypothetical protein	*			
78048631	XCV3075	hypothetical protein	*			
78049526	XCV3970	hypothetical protein	*			
T (Signal Transduction)	78045891	XCV0335	two-component system sensor protein	*		
	78046221	XCV0665	hypothetical protein	*		
	78047511	XCV1955	methyl-accepting chemotaxis protein	*		
	78047573	XCV2017	LuxR family two-component response regulator	*		
	78047696	XCV2140	phosphoprotein phosphatase	*		
	78047708	XCV2152	two component system sensor protein	*		
U (Intracellular trafficking and secretion)	78049009	XCV3453	two-component system sensor histidine kinase	*		
	78049801	XCV4245	universal stress protein family protein	*		

* indicates the protein is unique to wildtype.

Supplementary Table 3. Classification of highly expressed (>2 fold) protein in the Xcv Δ spcbXv using clusters of orthologous groups.

COG function	Accession	locus tag	gene function	fold change (Δ spcbXv/WT)	p-value	included in other group
C (Energy production and conversion)	78046031	XCV0475	pyruvate dehydrogenase E1 component	*		
	78047889	XCV2333	Zn-dependent alcohol dehydrogenase	*		
	78048397	XCV2841	NADH dehydrogenase subunit M	*		
	78049329	XCV3773	ATP synthase F ₀ F ₁ subunit A	*		
E (Amino Acid metabolism and transport)	78046130	XCV0574	phospho-2-dehydro-3-deoxyheptonate aldolase	*		
	78048427	XCV2871	N-(5'-phosphoribosyl)anthranilate isomerase	*		
	78048729	XCV3173	L-serine deaminase	*		
G (Carbohydrate metabolism and transport)	78047350	XCV1794	2-oxo-3-deoxygalactonate kinase	*		
	78048222	XCV2666	major facilitator superfamily protein	*		
	78048680	XCV3124	phosphotransferase system HPr enzyme	*		
	78049724	XCV4168	glucose-6-phosphate 1-dehydrogenase	*		
H (Coenzyme metabolism)	78046665	XCV1109	molybdopterin-converting factor chain 2	*		
	78047372	XCV1816	3-methyl-2-oxobutanoate hydroxymethyltransferase	*		
I (Lipid metabolism)	78047161	XCV1605	acyl-CoA dehydrogenase	*		
	78048146	XCV2590	esterase/lipase/thioesterase	*		
	78048863	XCV3307	siderophore biosynthesis protein	*		
	78049608	XCV4052	linoleoyl-CoA desaturase	*		
J (Translation)	78047623	XCV2067	radical SAM superfamily protein	*		
L (Replication and repair)	78047815	XCV2259	excinuclease ABC subunit C	2.26	0.049	
	78045611	XCV0055	helicase	*		
	78048308	XCV2752	A/G-specific adenine glycosylase	*		
	78048491	XCV2935	DNA polymerase III subunit delta	*		
	78049614	XCV4058	hypothetical protein	*		
M (Cell wall/membrane/envelope biogenesis)	78046355	XCV0799	hypothetical protein	2.14	0.033	
	78046658	XCV1102	lipopolysaccharide core biosynthesis heptosyltransferase	*		
	78049149	XCV3593	lipid A biosynthesis lauroyl acyltransferase	*		
	78049476	XCV3920	hypothetical protein	*		
	78049891	XCV4335	starvation sensing protein	*		
O (Post-translational modification, protein turnover, chaperone functions)	78046493	XCV0937	methionine sulfoxide reductase A	*		
	78046728	XCV1172	low molecular weight heat shock protein	*		
	78048082	XCV2526	cytochrome c-type biogenesis protein CcmE	*		
	78049546	XCV3990	DNA-binding/iron metalloprotein/AP endonuclease	*		
	78049554	XCV3998	cytochrome oxidase assembly protein	*		
P (Inorganic ion transport and metabolism)	78048545	XCV2989	TonB-dependent outer membrane receptor	2.36	0.026	
	78045749	XCV0193	superoxide dismutase	*		
	78046270	XCV0714	TonB-dependent outer membrane receptor	*		
	78049343	XCV3787	outer membrane lipoprotein	*		
	78049401	XCV3845	manganese-containing catalase	*		
	78049720	XCV4164	magnesium transporter	*		
	78049780	XCV4224	TonB-dependent outer membrane receptor	*		
Q (Secondary Structure)	78050007	XCV4451	ABC transporter permease	*		
S (Function unknown)	78048888	XCV3332	hypothetical protein	2.40	0.014	
	78048066	XCV2510	TonB-dependent outer membrane receptor	3.47	0.040	
	78045353	XCVd0044	secreted protein	*		
	78045594	XCV0038	hypothetical protein	*		
	78046023	XCV0467	short chain dehydrogenase	*		
	78046053	XCV0497	hypothetical protein	*		
	78046306	XCV0750	hypothetical protein	*		
	78046333	XCV0777	hypothetical protein	*		
	78046737	XCV1181	oxidoreductase	*		
	78046931	XCV1375	hypothetical protein	*		
	78047508	XCV1952	methyl-accepting chemotaxis protein	*		
	78047600	XCV2044	methyl-accepting chemotaxis protein	*		
	78047626	XCV2070	hypothetical protein	*		
	78048071	XCV2515	hypothetical protein	*		
	78048157	XCV2601	hypothetical protein	*		
	78048485	XCV2929	outer membrane protein	*		
	78048594	XCV3038	phospholipase accessory protein	*		
	78048615	XCV3059	hypothetical protein	*		
	78048730	XCV3174	alpha/beta hydrolase	*		
	78048776	XCV3220	hypothetical protein	*		
	78048829	XCV3273	biopolymer transport TolA protein	*		
	78048886	XCV3330	permease	*		
	78049376	XCV3820	hypothetical protein	*		
78049622	XCV4066	hypothetical protein	*			
78049963	XCV4407	hypothetical protein	*			
78050015	XCV4459	RmuC family DNA recombination protein	*			
78045406	XCVd0097	Cluster of Tn5044 transposase	*			
78045465	XCVd0156	hypothetical protein	*			
78049189	XCV3633	hypothetical protein	*			
78050010	XCV4454	hypothetical protein	*			
T (Signal Transduction)	78046444	XCV0888	two-component system sensor protein	*		
	78047539	XCV1983	sensor protein	*		
	78047571	XCV2015	two-component response regulator	*		
	78049848	XCV4292	two-component system sensor/regulator hybrid protein	*		
U (Intracellular trafficking and secretion)	78045306	XCVc0041	type IV secretion system protein VirB4	*		
	78046541	XCV0985	preprotein translocase subunit SecE	*		
	78047809	XCV2253	biopolymer transport ExbD protein	*		
	78048363	XCV2807	type IV secretion system protein VirB9	*		
	78049214	XCV3658	type II secretory pathway component	*		
V (Defense mechanisms)	78045743	XCV0187	UDP pyrophosphate phosphatase	*		
	78046441	XCV0885	ABC transporter ATP-binding protein	*		
	78049312	XCV3756	ABC transporter ATP-binding protein	*		
	78049522	XCV3966	RND superfamily protein	*		
	78049709	XCV4153	ABC transporter permease	*		

* indicates the protein is unique to Xcv Δ spcbXv.