

Table S2. Comparison of expression of the genes regulated by *rsmA* in *Xanthomonas citri* subsp. *citri*. using microarray.

Locus tag	Gene name	Log ₂ ratio of fold change ($\Delta rsmA/WT$) ^a	Log ₂ ratio of fold change (pBRArsmA/pBRA) ^b	Product description
		Down-regulated	Up-regulated	
XAC0035	-	-1.01	2.37	hypothetical
XAC0076	<i>avrBS2</i>	-1.00	2.17	putative type 3 secretion effector
XAC0104	-	-1.09	2.37	metalloprotease
XAC0105	-	-1.10	-	hypothetical
XAC0155	-	-1.13	2.32	Trehalose synthase
XAC0224	<i>poxB</i>	-1.05	1.98	pyruvate dehydrogenase
XAC0225	<i>ntrB</i>	-1.15	2.76	histidine kinase
XAC0226	<i>ntrC</i>	-1.20	3.63	response regulator
XAC0239	-	-1.40	-	hypothetical
XAC0277	<i>xopR</i>	-2.10	2.8	putative type 3 secretion effector
XAC0286	<i>xopE1</i>	-1.80	2.68	putative type 3 secretion effector
XAC0393	<i>hpaF</i> (<i>xopAE</i>)	-1.41	2.58	type 3 secretion effector
XAC0394	<i>hrpF</i>	-1.23	2.79	type 3 secretion protein HrpF
XAC0396	<i>hpaB</i>	-1.13	3.31	type 3 secretion protein HpaB
XAC397	<i>hrpE</i>	-1.44	2.65	type 3 secretion protein HrpE
XAC0398	<i>hrpD6</i>	-1.30	2.87	type 3 secretion protein HrpD6
XAC0399	<i>hrpD5</i>	-1.56	3.50	type 3 secretion protein HrpD5
XAC0400	<i>hpaA</i>	-1.25	3.58	type 3 secretion protein HpaA
XAC0401	<i>hrcS</i>	-1.31	3.62	type 3 secretion protein HrcS
XAC0402	<i>hrcR</i>	-1.41	3.53	type 3 secretion protein HrcR
XAC0403	<i>hrcQ</i>	-1.73	3.98	type 3 secretion protein HrcQ
XAC0404	<i>hpaP</i>	-1.10	3.37	type 3 secretion protein HpaP
XAC0405	<i>hrcV</i>	-1.26	3.35	type 3 secretion protein HrcV
XAC0406	<i>hrcU</i>	-1.40	3.78	type 3 secretion protein HrcU
XAC0407	<i>hrpB1</i>	-1.37	3.48	type 3 secretion protein HrpB1
XAC0408	<i>hrpB2</i>	-1.32	3.92	type 3 secretion protein HrpB2
XAC0409	<i>hrcJ</i>	-1.82	3.91	type 3 secretion protein HrcJ
XAC0410	<i>hrpB4</i>	-1.75	4.05	type 3 secretion protein HrpB4
XAC0411	<i>hrpB5</i>	-1.46	4.12	type 3 secretion protein HrpB5
XAC0412	<i>hrcN</i>	-1.23	3.78	type 3 secretion protein HrcN
XAC0413	<i>hrpB7</i>	-1.17	4.02	type 3 secretion protein HrpB7
XAC0414	<i>hrcT</i>	-1.00	3.96	type 3 secretion protein HrcT
XAC0415	<i>hrcC</i>	-1.06	2.51	type 3 secretion protein HrcC
XAC0416	<i>hpa1</i>	-1.72	3.28	type 3 secretion protein Hpa1
XAC0417	<i>Hpa2</i>	-1.13	2.53	type 3 secretion protein Hpa2
XAC0435	<i>virK</i>	-1.08	2.15	VirK
XAC0494	-	-1.10	-	histidine kinase
XAC0501	-	-1.24	2.96	hypothetical
XAC0543	<i>xopX</i>	-1.15	2.52	hypothetical
XAC0601	<i>xopV</i>	-	2.01	putative type 3 secretion effector
XAC0637	<i>hslV</i>	-1.18	1.67	ATP-dependent protease peptidase subunit
XAC0638	<i>hslU</i>	-1.29	1.73	ATP-dependent protease ATP-binding subunit
XAC0644	-	-1.12	-	diguanylate cyclase
XAC0754	<i>xopI</i>	-1.28	2.87	putative type 3 secretion effector
XAC0878	<i>pcaH</i>	-1.05	3.33	protocatechuate 4.5-dioxygenase subunit beta
XAC0879	<i>ligA</i>	-1.00	3.49	protocatechuate 4.5-dioxygenase subunit alpha
XAC0880	<i>pcaQ</i>	-1.12	3.01	transcriptional regulator
XAC0916	-	-1.09	2.37	hydrolase
XAC1124	-	-1.13	2.52	hypothetical

XAC1171	<i>stkxacI</i>	-1.13	2.37	serine/threonine kinase
XAC1172	-	-1.32	3.40	hypothetical
XAC1208	<i>xopP</i>	-1.07	3.43	putative type 3 secretion effector
XAC1211	<i>katE</i>	-1.04	2.54	catalase
XAC1242	<i>pthX</i>	-1.06	-	pathogenicity-related protein
XAC1265	<i>hrpG</i>	-1.23	1.32	OmpR transcriptional regulator
XAC1266	<i>hrpX</i>	-1.18	1.41	AraC transcriptional regulator
XAC1319	<i>algU</i>	-1.05	2.81	sigma factor RpoE
XAC1354	-	-1.05	-	hypothetical
XAC1525	<i>tyrA</i>	-1.36	2.05	prephenate dehydrogenase
XAC1682	<i>rpoE</i>	-	2.68	Sigma factor RpoE
XAC1743	<i>csrA/rsmA</i>	-5.38	4.62	post-transcriptional regulator
XAC2053	<i>tex</i>	-1.08	2.89	transcription-related protein
XAC2164	-	-1.73	2.03	hypothetical
XAC2165	-	-1.46	2.15	isochorismatase
XAC2166	-	-1.58	1.85	AraC transcriptional regulator
XAC2399	<i>htpX</i>	-1.42	1.96	heat shock protein HtpX
XAC2528	<i>hptG</i>	-1.38	-	heat shock protein HtpG
XAC2786	<i>xopN</i>	-1.51	3.61	type 3 secretion effector
XAC2853	-	-1.25	1.63	cysteine protease
XAC2922	<i>hrpW</i>	-1.21	1.88	type 3 secretion protein HrpW
XAC2946	-	-1.80	-	hypothetical
XAC3085	<i>xopK</i>	-1.47	3.89	putative type 3 secretion effector
XAC3090	<i>xopL</i>	-	3.01	putative type 3 secretion effector
XAC3230	<i>xopAI</i>	-1.10	1.51	putative type 3 secretion effector
XAC3647	<i>pheA</i>	-1.44	3.29	Chorismate mutase
XAC3666	<i>xopAK</i>	-1.06	2.41	putative type 3 secretion effector
XAC3683	-	-1.00	1.97	histidine kinase
XAC3685	-	-1.27	2.41	hypothetical
XAC3878	-	-1.22	-	disulphide-isomerase
XAC4213	<i>xopAD</i>	-1.31	3.37	putative type 3 secretion effector
XAC4235	-	-1.36	-	hypothetical
XAC4269	-	-1.20	2.53	hypothetical
XAC4327	<i>uahA</i>	-1.17	3.69	allophanate hydrolase
XAC4333	<i>xopQ</i>	-1.18	2.64	putative type 3 secretion effector
XACb0011	<i>xopE3</i>	-1.08	2.12	putative type 3 secretion effector
		Upregulated	Downregulated	
XAC0028	<i>egl</i>	3.05	-5.35	cellulase
XAC0298	-	1.10	-	hypothetical
XAC0346	<i>celA</i>	2.11	-4.6	cellulase
XAC0466	-	1.64	-3.70	lytic enzyme
XAC0467	-	1.12	-3.62	hypothetical
XAC0545	<i>aroG</i>	1.42	-2.01	phospho-2-dehydro-3-deoxyheptonate aldolase
XAC0604	<i>treA</i>	2.26	-1.53	trehalase
XAC0827	<i>nrtB</i>	1.65	-4.31	permease
XAC0828	<i>nrtCD</i>	1.82	-4.46	ABC transporter ATP-binding component
XAC0829	-	2.23	-5.11	ABC transporter substrate binding protein
XAC0830	<i>tauD</i>	2.08	-5.15	taurine dioxygenase
XAC0851	<i>slfA</i>	1.25	-5.01	NADH-dependent FMN reductase
XAC0868	-	1.86	-4.55	hypothetical
XAC1034	-	-	-4.28	peptidyl-Asp metalloendopeptidase
XAC1145	-	1.12	-	hypothetical
XAC1200	-	1.05	-3.95	prolyl oligopeptidase family protein
XAC1264	-	1.20	-1.52	hypothetical
XAC1284	-	-	-2.25	response regulator protein
XAC1328	-	1.98	-4.34	response regulator
XAC1397	-	1.54	-	padR transcriptional regulator
XAC1426	<i>ecpD</i>	2.85	-3.94	pili assembly chaperone

XAC1427	<i>pru</i>	2.14	-5.21	protein U
XAC1495	<i>cspA</i>	-	-3.94	major cold shock protein
XAC1492	-	2.16	-5.03	hypothetical
XAC1573	<i>phoU</i>	2.65	-2.05	phosphate regulon transcriptional regulator
XAC1778	-	1.44	-4.28	histidine kinase
XAC1779	-	1.18	-3.68	hypothetical
XAC1877	<i>rpfG</i>	2.26	-1.50	phosphodiesterase
XAC1878	<i>rpfC</i>	1.07	-	histidine kinase
XAC1906	<i>cheW</i>	1.78	-2.94	chemotaxis protein
XAC1907	<i>parA</i>	2.20	-3.46	chromosome 3 partitioning protein
XAC1909	<i>motD</i>	1.72	-	flagellar motor protein MotD
XAC1930	<i>cheA</i>	1.42	-4.03	chemotaxis related protein
XAC1931	<i>cheZ</i>	2.25	-5.21	chemotaxis related protein
XAC1932	<i>cheY</i>	2.44	-5.37	chemotaxis protein
XAC1933	<i>fliA</i>	2.33	-5.12	RNA polymerase sigma factor
XAC1934	<i>fleN</i>	2.72	-5.35	flagellar biosynthesis switch protein
XAC1935	<i>flhF</i>	2.61	-5.28	flagellar biosynthesis regulator
XAC1936	<i>flhA</i>	2.20	-3.84	flagellar biosynthesis protein
XAC1937	<i>flhB</i>	1.80	-2.32	flagellar biosynthesis protein
XAC1941	<i>fliR</i>	2.18	-1.71	flagellar biosynthesis protein
XAC1942	<i>fliQ</i>	1.78	-1.81	flagellar biosynthesis protein
XAC1944	<i>fliP</i>	2.40	-2.01	flagellar biosynthesis protein
XAC1945	<i>fliO</i>	1.77	-3.82	flagellar protein
XAC1946	<i>fliN</i>	2.29	-3.79	flagellar protein
XAC1947	<i>fliM</i>	2.02	-3.48	flagellar protein
XAC1948	<i>fliL</i>	1.83	-3.04	flagellar protein
XAC1949	<i>fliK</i>	1.71	-3.32	flagellar protein
XAC1954	<i>fliF</i>	1.56	-2.84	flagellar MS-ring protein
XAC1955	<i>fliE</i>	1.69	-4.12	flagellar protein
XAC1965	<i>acp</i>	1.82	-1.83	acyl carrier protein
XAC1966	<i>vioA</i>	1.42	-	nucleotide sugar transaminase
XAC1974	<i>fliD</i>	1.44	-4.07	flagellar protein
XAC1975	<i>fliC</i>	1.51	-5.21	flagellin
XAC1976	<i>flgL</i>	1.48	-5.85	flagellar hook-associated protein
XAC1980	<i>flgH</i>	1.42	-5.48	flagellar basal body L-ring protein
XAC1983	<i>flgE</i>	1.57	-5.01	flagellar hook protein FlgE
XAC1986	<i>FlgB</i>	1.62	-5.30	flagellar basal body rod protein FlgB
XAC1990	-	2.19	-2.64	hypothetical
XAC2135	-	1.38	-2.01	hypothetical
XAC2151	<i>yapH</i>	1.18	-5.43	Filamentous hemagglutinin-related protein
XAC2250	-	1.26	-4.32	hypothetical
XAC2443	-	1.43	-2.98	hypothetical
XAC2463	-	1.24	-3.18	hypothetical
XAC2529	<i>rhsD</i>	1.72	-5.43	RhsD
XAC2608	<i>virB6</i>	2.47	-3.31	VirB6
XAC2609	-	2.81	-4.01	hypothetical
XAC2610	-	2.23	-3.92	hypothetical
XAC2614	<i>virB4</i>	1.52	-2.18	VirB4
XAC2616	<i>virB2</i>	2.44	-4.71	VirB2
XAC2618	<i>virB11</i>	2.39	-4.73	VirB11
XAC2619	<i>virB10</i>	1.98	-5.23	VirB10
XAC2663	-	1.07	-3.37	transposase
XAC2664	<i>pilE</i>	1.05	-4.13	PilE protein
XAC2774	-	1.31	-5.49	TonB
XAC2885	-	1.86	-1.57	phospholipase A1
XAC2897	-	1.97	-	diguanylate cyclase
XAC2992	-	1.17	-5.32	endoproteinase Arg-C
XAC3031	-	1.53	-3.21	histidine kinase
XAC3241	<i>fimA</i>	1.31	-5.61	FimA

XAC3262	-	1.08	-2.86	hypothetical
XAC3267	-	1.12	-2.18	hypothetical
XAC3279	-	2.39	-5.71	hypothetical
XAC3340	<i>cysG</i>	1.78	-4.72	siroheme synthase
XAC3380	-	1.12	-4.76	hypothetical
XAC3533	-	1.83	-2.83	hypothetical
XAC3634	-	1.61	-3.63	hypothetical
XAC3636	-	2.10	-2.71	hypothetical
XAC4011	-	2.42	-3.19	hypothetical
XAC4026	-	2.01	-4.31	hypothetical
XACa0013	-	1.08	-2.06	hypothetical

^aThe Log₂-fold change of each gene was derived from the comparison of *rsmA* mutant versus wild-type (p<0.05; Log₂>=1). ^bThe Log₂-fold change of each gene was derived from the comparison of the $\Delta rsmA$ mutant carrying the construct pBRArsmA and empty plasmid pBRA. Transcriptome analyses were performed with four independent biological samples for each condition.