

TABLE S3. Genes that are differentially transcribed in C- Δ *vieA* relative to C-wt. Differentially expressed genes were determined using SAM software with ≥ 2.0 fold change in gene expression and False Discovery Rate (FDR) ≤ 0.01 as criteria. List of VpsR and σ^E regulated genes were obtained from previously published transcriptome data (12, 56). σ^E regulated genes were selected using ≥ 1.5 fold change in gene expression and P-value ≤ 0.1 as criteria from published supplementary data (12) and VpsR regulated genes were selected using ≥ 1.5 fold change in gene expression and FDR ≤ 0.01 as criteria from published supplementary data (56). Positively and negatively regulated genes by VpsR and σ^E are shown as plus (+) and minus (-), respectively.

Gene ID / Main Cellular Roles		Fold Change	Regulated By
Amino Acid Biosynthesis			
VC0030	acetolactate synthase II_ small subunit <i>ilvM</i>	2.67	
VC1590	acetolactate synthase <i>ilvK</i>	2.10	
Biosynthesis of Cofactors, Prosthetic Groups, and Carriers			
VC0064	Thiamine thiS protein <i>thiS</i>	0.43	
VC0194	gamma-glutamyltranspeptidase <i>ggt</i>	2.21	VpsR(+)
VC0472	S-adenosylmethionine synthase <i>metK</i>	0.48	
VC2254	1-deoxy-D-xylulose 5-phosphate reductoisomerase <i>dxr</i>	2.57	
VCA0723	3-hydroxy-3-methylglutaryl CoA reductase <i>hmgA</i>	2.62	
Cell Envelope			
VC0240	ADP-L-glycero-D-mannoheptose-6-epimerase <i>rfaD</i>	0.50	
VC0533	lipoprotein NlpD <i>nlpD</i>	0.26	
VC0602	penicillin-binding protein 1B <i>mrcB</i>	3.21	
VC0700	soluble lytic murein transglycosylase <i>slt</i>	4.66	VpsR(+)
VC1195	lipoprotein_ putative	2.32	
VC1622	outer membrane protein_ putative	3.35	
VC1956	lytic murein transglycosylase_ putative	2.59	σ^E (+)
VC1962	lipoprotein	5.76	σ^E (-), VpsR(+)
VC2213	outer membrane protein OmpA <i>ompA</i>	2.57	σ^E (-)
VC2247	lipid-A-disaccharide synthase <i>lpxB</i>	2.36	
VC2251	outer membrane protein OmpH <i>ompH</i>	2.56	
VC2400	UDP-N-acetylmuramate--alanine ligase <i>murC</i>	2.14	
VC2401	UDP-N-acetylglucosamine--N-acetylmuramyl-(pentapeptide) pyrophosphoryl-undecaprenol N-acetylglucosamine transferase <i>murG</i>	2.16	
VC2406	UDP-N-acetylmuramoylalanyl-D-glutamate--2_6-diaminopimelate ligase <i>murE</i>	2.18	
VC2514	UDP-N-acetylglucosamine 1-carboxyvinyltransferase <i>murA</i>	2.16	
VCA0867	outer membrane protein OmpW <i>ompW</i>	0.47	σ^E (-)
Cellular Processes: Chemotaxis and Motility			
VC0216	methyl-accepting chemotaxis protein	0.40	
VC1008	sodium-type flagellar protein MotY <i>motY</i>	0.41	
VC1248	methyl-accepting chemotaxis protein	0.42	
VC1289	methyl-accepting chemotaxis protein	0.33	
VC1298	methyl-accepting chemotaxis protein	0.42	
VC1413	methyl-accepting chemotaxis protein	0.33	VpsR(-)
VC1602	chemotaxis protein CheV <i>cheV-I</i>	0.47	
VC1898	methyl-accepting chemotaxis protein	0.30	
VC2059	purine-binding chemotaxis protein CheW <i>cheW-I</i>	0.50	
VC2064	chemotaxis protein CheZ <i>cheZ</i>	0.44	

VC2065	chemotaxis protein CheY <i>cheY-3</i>	0.48	
VC2068	flagellar biosynthetic protein FlhF_ <i>putative</i>	0.43	
VC2069	flagellar biosynthetic protein FlhA <i>flhA</i>	0.36	
VC2128	flagellar hook-length control protein FliK_ <i>putative</i>	0.29	
VC2130	flagellum-specific ATP synthase FliI <i>fliI</i>	0.48	
VC2131	flagellar assembly protein FliH_ <i>putative</i>	0.50	
VC2134	flagellar hook-basal body complex protein FliE <i>fliE</i>	0.47	
VC2138	flagellar protein FliS <i>fliS</i>	0.36	
VC2141	flagellin FlaG <i>flaG</i>	0.25	
VC2142	flagellin FlaB <i>flaB</i>	0.16	
VC2143	flagellin FlaD <i>flaD</i>	0.11	
VC2144	flagellin FlaE <i>flaE</i>	0.27	
VC2161	methyl-accepting chemotaxis protein	0.22	
VC2187	flagellin FlaC <i>flaC</i>	0.13	
VC2188	flagellin core protein A <i>flaA</i>	0.12	
VC2190	flagellar hook-associated protein FlgL <i>flgL</i>	0.44	
VC2191	flagellar hook-associated protein FlgM <i>flgM</i>	0.18	
VC2192	flagellar protein FlgJ <i>flgJ</i>	0.41	
VC2194	flagellar L-ring protein FlgH <i>flgH</i>	0.38	
VC2195	flagellar basal-body rod protein FlgG <i>flgG</i>	0.24	
VC2197	flagellar hook protein FlgE <i>flgE</i>	0.32	
VC2198	basal-body rod modification protein FlgD <i>flgD</i>	0.46	
VC2200	flagellar basal-body rod protein FlgB <i>flgB</i>	0.13	
VC2204	negative regulator of flagellin synthesis FlgM_ <i>putative</i>	0.46	
VC2601	sodium-type flagellar protein MotX <i>motX</i>	0.34	
VCA0864	methyl-accepting chemotaxis protein	4.32	VpsR(+)
VCA0954	chemotaxis protein CheV_ <i>putative</i>	0.37	

Cellular Processes: Pathogenesis

VC0824	tagD protein <i>tagD</i>	0.31	
VC0825	toxin co-regulated pilus biosynthesis protein I <i>tcpI</i>	0.24	
VC0827	toxin co-regulated pilus biosynthesis protein H <i>tcpH</i>	0.49	
VC0830	toxin co-regulated pilus biosynthesis protein Q <i>tcpQ</i>	0.20	
VC0831	toxin co-regulated pilus biosynthesis outer membrane protein C <i>tcpC</i>	0.32	
VC0832	toxin co-regulated pilus biosynthesis protein R <i>tcpR</i>	0.26	
VC0833	toxin co-regulated pilus biosynthesis protein D <i>tcpD</i>	0.17	
VC0834	toxin co-regulated pilus biosynthesis protein S <i>tcpS</i>	0.23	
VC0835	toxin co-regulated pilus biosynthesis protein T <i>tcpT</i>	0.25	
VC0836	toxin co-regulated pilus biosynthesis protein E <i>tcpE</i>	0.28	
VC0837	toxin co-regulated pilus biosynthesis protein F <i>tcpF</i>	0.23	
VC0838	TCP pilus virulence regulatory protein <i>tcpN/toxT</i>	0.34	
VC0839	leader peptidase TcpJ <i>tcpJ</i>	0.39	
VC0840	accessory colonization factor AcfB <i>acfB</i>	0.37	
VC0841	accessory colonization factor AcfC <i>acfC</i>	0.39	
VC0843	tagE protein <i>tagE-1</i>	0.49	
VC0844	accessory colonization factor AcfA <i>acfA</i>	0.21	
VC1451	RTX toxin RtxA <i>rtxA</i>	2.01	
VC2724	cholera toxin secretion protein EpsM <i>epsM</i>	3.03	
VCA0594	hemolysin <i>hly</i>	2.30	

Cellular Processes: Other

VC1583	superoxide dismutase_ <i>Cu-Zn sodC</i>	2.03	VpsR(+)
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VC1676	phage shock protein C <i>pspC</i>	2.89	σ^E (-)
VC1678	phage shock protein A <i>pspA</i>	3.01	σ^E (-)
VC2402	cell division protein FtsW <i>ftsW</i>	2.12	
VC2451	GTP pyrophosphokinase <i>relA</i>	3.97	
Central Intermediary Metabolism			
VC0606	nitrogen regulatory protein P-II <i>glnB-1</i>	0.45	
VC1945	FAD monooxygenase_ PheA/TfdB family	8.80	
VC2231	oxidoreductase_ acyl-CoA dehydrogenase family	2.22	
VC2239	nitrogen regulatory protein P-II <i>glnB-2</i>	2.30	σ^E (+)
VC2240	decarboxylase	2.99	σ^E (+), VpsR(+)
VC2559	sulfate adenylate transferase_ subunit 1 <i>cysN</i>	2.02	VpsR(-)
VCA0316	acetyltransferase_ putative	2.03	
VCA0824	diaminobutyrate--pyruvate aminotransferase <i>ectB</i>	2.12	
VCA0947	spermidine n1-acetyltransferase <i>speG</i>	2.43	VpsR(+)
DNA Metabolism			
VC1672	DNA-3-methyladenine glycosidase I <i>tag</i>	3.67	
VC1814	deoxyribodipyrimidine photolyase <i>phrB-1</i>	2.67	
VC1919	DNA-binding protein HU-beta <i>hupB</i>	0.48	
VC2417	single-stranded-DNA-specific exonuclease RecJ <i>recJ</i>	2.19	σ^E (+)
VCA1017	methylated-DNA--protein-cysteine S-methyltransferase <i>ogt</i>	2.19	
Energy Metabolism			
VC0168	cytochrome c5 <i>cycB</i>	0.40	
VC0298	acetyl-CoA synthase <i>acs-1</i>	2.44	
VC0432	malate dehydrogenase <i>mdh</i>	0.49	
VC0574	ubiquinol--cytochrome c reductase_ cytochrome B <i>petB</i>	0.37	
VC0575	ubiquinol--cytochrome c reductase_ cytochrome c1 <i>petC</i>	0.42	
VC0769	chitinase_ putative	4.37	
VC0819	aldehyde dehydrogenase <i>aldA-1</i>	0.34	
VC1242	succinylglutamate desuccinylase <i>astE</i>	0.48	
VC1300	L-serine dehydratase 1 <i>sdaA-1</i>	0.49	
VC1337	methylcitrate synthase <i>prpC</i>	2.06	
VC1338	aconitate hydratase 1 <i>acnA</i>	2.41	
VC1439	cytochrome c oxidase_ subunit CcoP <i>ccoP</i>	0.39	
VC1440	cytochrome c oxidase_ subunit CcoQ <i>ccoQ</i>	0.47	
VC1441	cytochrome c oxidase_ subunit CcoO <i>ccoO</i>	0.36	
VC1442	cytochrome c oxidase_ subunit CcoN <i>ccoN</i>	0.32	
VC1515	chaperone_ formate dehydrogenase-specific_ putative	2.71	
VC1573	fumarate hydratase_ class II_ aerobic <i>fumC</i>	4.38	
VC1693	cytochrome c-type protein TorC <i>torC</i>	0.47	
VC2291	NADH:ubiquinone oxidoreductase_ Na translocating_ hydrophobic membrane protein NqrE <i>nqrE</i>	0.45	
VC2698	aspartate ammonia-lyase <i>aspA</i>	0.35	VpsR(-)
VCA0136	glycerophosphoryl diester phosphodiesterase <i>glpQ</i>	0.37	VpsR(-)
VCA0140	spindolin-related protein	2.66	
VCA0538	cytochrome b561_ putative	3.03	
VCA0700	chitodextrinase	2.29	
VCA0811	chitinase_ putative	6.68	VpsR(+)
VCA0828	phenylalanine-4-hydroxylase <i>phhA</i>	0.34	
Fatty Acid and Phospholipid Metabolism			
VC1063	acyl-CoA thioesterase II <i>tesB</i>	0.45	

VCA0035	phosphatidylglycerophosphatase B_ putative	3.76	σ^E (-)
VCA0690	acetyl-CoA acetyltransferase	2.02	

Mobile and Extrachromosomal Element Functions

VC0516	phage integrase	2.04	
VC0818	transposase_ putative authentic point mutation	2.14	
VC0846	integrase_ degenerate	0.40	
VC1455	transcriptional repressor RstR <i>rstR-1</i>	2.04	

Protein Fate

VC0034	thiol:disulfide interchange protein <i>tpcG</i>	2.03	σ^E (+)
VC0157	alkaline serine protease	28.05	VpsR(+)
VC0354	peptidyl-prolyl cis-trans isomerase_ FKBP-type <i>fkpA</i>	2.47	
VC0554	protease_ insulinase family/protease_ insulinase family	2.60	
VC0566	protease DO <i>htrA</i>	4.47	σ^E (+)
VC1107	outer membrane lipoproteins carrier protein <i>lola</i>	2.21	σ^E (-)
VC1674	periplasmic linker protein_ putative	3.34	σ^E (-)
VC1709	zinc protease_ insulinase family	0.42	VpsR(-)
VC2723	general secretion pathway protein N <i>epsN</i>	2.49	
VC2725	general secretion pathway protein L <i>epsL</i>	2.55	
VC2726	general secretion pathway protein K <i>epsK</i>	2.23	VpsR(+)
VC2727	general secretion pathway protein J <i>epsJ</i>	2.91	VpsR(+)
VC2730	general secretion pathway protein G <i>epsG</i>	2.02	
VC2731	general secretion pathway protein F <i>epsF</i>	2.15	VpsR(+)
VC2732	general secretion pathway protein E <i>epsE</i>	2.01	VpsR(+)
VC2733	general secretion pathway protein D_ authentic frameshift <i>gspD</i>	2.63	VpsR(+)
VCA0223	protease <i>prtV</i>	2.06	
VCA0692	protein-export membrane protein SecF_ authentic frameshift <i>secF-2</i>	2.12	

Protein Synthesis

VC0007	ribosomal protein L34 <i>rpmH</i>	0.46	
VC2452	TrmA family RNA methyltransferase_ putative	3.51	
VC2679	ribosomal protein L31 <i>rpmE</i>	0.40	VpsR(+)

Purine, Pyrimidines, Nucleosides, Nucleotides

VC1034	uridine phosphorylase <i>udp-1</i>	0.38	VpsR(-)
VC2277	xanthine-guanine phosphoribosyltransferase <i>gpt</i>	0.46	

Regulatory Functions

VC0192	transcriptional regulator_ AraC/XylS family	2.71	
VC0665	sigma-54 dependent transcriptional regulator <i>vpsR</i>	7.08	
VC1082	response regulator	0.35	
VC1142	cold shock-like protein CspD <i>cspD</i>	2.17	
VC1638	DNA-binding response regulator	6.77	σ^E (-)
VC1639	sensor histidine kinase	7.75	σ^E (-)
VC1651	response regulator VieB <i>vieB</i>	0.20	
VC1653	sensory box sensor histidine kinase/response regulator VieS <i>vieS</i>	0.28	
VC1825	transcriptional regulator	2.10	
VC1947	transcriptional regulator_ LysR family	5.38	σ^E (-)
VC2464	sigma-E factor regulatory protein RseC <i>rseC</i>	2.04	σ^E (+)
VC2465	sigma-E factor regulatory protein RseB <i>rseB</i>	3.09	σ^E (+)
VC2466	sigma-E factor negative regulatory protein RseA <i>rseA</i>	4.07	σ^E (+)
VC2516	anti-sigma B factor antagonist_ putative	2.92	σ^E (-)
VCA0239	transcriptional regulator	2.09	VpsR(+)
VCA0257	sensor histidine kinase	2.47	

VCA0565	sensor histidine kinase	2.05	
VCA0566	transcriptional regulator	2.44	
VCA0888	transcriptional regulator_ LuxR family	2.28	VpsR(+)
VCA0917	transcriptional regulator_ TetR family	3.88	VpsR(+)
VCA0952	transcriptional regulator_ LuxR family <i>vpsT</i>	6.83	VpsR(+)
Transcription			
VC0150	RNA polymerase sigma-32 factor <i>rpoH</i>	2.06	
VC0159	RNA-binding protein	0.37	
VC2467	RNA polymerase sigma-E factor <i>rpoE</i>	3.11	
Transport and Binding Proteins			
VC0172	peptide ABC transporter_ permease protein	0.43	
VC0284	TonB system receptor_ authentic point mutation	2.02	
VC0704	spermidine/putrescine ABC transporter_ periplasmic spermidine/putrescine-binding protein_ putative	2.59	VpsR(-)
VC0724	phosphate ABC transporter_ permease protein <i>pstC-1</i>	2.20	
VC0995	PTS system_ N-acetylglucosamine-specific IIBC component <i>nagE</i>	2.39	
VC1042	long-chain fatty acid transport protein <i>fadL-1</i>	2.45	
VC1301	serine transporter <i>sdaC-1</i>	0.34	VpsR(-)
VC1328	galactoside ABC transporter_ permease protein <i>mgIC</i>	2.17	
VC1486	ABC transporter_ ATP-binding protein	3.30	σ^E (+)
VC1549	glycerol-3-phosphate ABC transporter_ periplasmic glycerol-3-phosphate-binding protein <i>ugpB</i>	0.34	
VC1673	transporter_ AcrB/D/F family	3.38	
VC1675	multidrug resistance protein_ putative	3.75	
VC1854	ompT protein <i>ompT</i>	0.30	σ^E (-)
VC1927	C4-dicarboxylate transport protein <i>dctM</i>	2.20	
VC1928	C4-dicarboxylate transport protein DctQ_ putative	3.04	
VC1929	C4-dicarboxylate-binding periplasmic protein <i>dctP-2</i>	2.51	
VC1944	PvcB protein <i>pvcB</i>	7.01	
VC2013	PTS system_ glucose-specific IIBC component <i>ptsG</i>	0.37	
VC2037	Na ⁺ /H ⁺ antiporter <i>yqkI</i>	0.48	σ^E (+)
VC2608	ABC transporter_ ATP-binding protein	2.39	
VCA0025	transporter_ NadC family	0.48	
VCA0036	sodium/dicarboxylate symporter	0.43	
VCA0137	glycerol-3-phosphate transporter <i>glpT</i>	0.48	VpsR(-)
VCA0576	heme transport protein HutA <i>hutA</i>	2.70	
VCA0591	peptide ABC transporter_ periplasmic peptide-binding protein_ putative	2.55	σ^E (+)
VCA0745	glycerol uptake facilitator protein_ authentic frameshift <i>glpF</i>	0.46	
VCA0911	TonB system transport protein ExbB1 <i>exbB1</i>	4.02	
VCA0912	TonB system transport protein ExbD1 <i>exbD1</i>	2.37	VpsR(-)
VCA0914	hemin ABC transporter_ permease protein_ putative	2.09	
Unkown Function			
VC0036	FixG-related protein	0.42	
VC0130	GGDEF family protein	0.49	
VC0595	glutamyl-tRNA synthetase-related protein	2.27	
VC0851	small protein A <i>smpA</i>	2.07	σ^E (+)
VC1029	GGDEF family protein	2.96	VpsR(+)
VC1353	GGDEF family protein	2.01	
VC1532	ROK family protein	0.49	
VC1897	Hit family protein	0.45	

VC2067	MinD-related protein	0.49	
VC2361	formate acetyl transferase-related protein	0.46	
VC2450	mazG protein <i>mazG</i>	2.56	
VCA0038	Sco1-related protein	2.08	
VCA0148	TagA-related protein	0.36	
VCA0165	GGDEF family protein	2.00	
VCA0175	MoxR-related protein	3.59	σ^E (+)
VCA0659	protein F-related protein	0.47	VpsR(+)
VCA0785	GGDEF family protein	6.41	VpsR(+)
VCA0969	pirin-related protein	2.01	

VPS Biosynthesis

VC0916	phosphotyrosine protein phosphatase	5.15	VpsR(+)
VC0917	UDP-N-acetylglucosamine 2-epimerase <i>wecB</i>	6.52	VpsR(+)
VC0918	UDP-N-acetyl-D-mannosaminuronic acid dehydrogenase <i>epsD</i>	10.28	VpsR(+)
VC0919	serine acetyltransferase-related protein	13.31	VpsR(+)
VC0920	exopolysaccharide biosynthesis protein EpsF_ putative	2.70	VpsR(+)
VC0922	hypothetical protein	2.97	VpsR(+)
VC0923	serine acetyltransferase-related protein	2.17	VpsR(+)
VC0924	capK protein_ putative	2.57	VpsR(+)
VC0925	polysaccharide biosynthesis protein_ putative	2.84	VpsR(+)
VC0926	hypothetical protein	4.60	VpsR(+)
VC0927	UDP-N-acetyl-D-mannosamine transferase <i>cpsF</i>	2.07	VpsR(+)
VC0928	hypothetical protein	14.26	VpsR(+)
VC0929	hypothetical protein	20.81	VpsR(+)
VC0930	hemolysin-related protein	17.79	VpsR(+)
VC0932	hypothetical protein	8.95	VpsR(+)
VC0933	hypothetical protein	36.40	VpsR(+)
VC0935	hypothetical protein	9.24	VpsR(+)
VC0936	polysaccharide export-related protein	6.92	VpsR(+)
VC0937	exopolysaccharide biosynthesis protein_ putative	3.38	VpsR(+)
VC0938	hypothetical protein	2.90	VpsR(+)

Hypothetical Proteins

VC0131	conserved hypothetical protein	2.36	
VC0187	conserved hypothetical protein	3.02	
VC0370	conserved hypothetical protein	2.90	
VC0420	conserved hypothetical protein	2.24	
VC0421	conserved hypothetical protein	2.26	
VC0483	conserved hypothetical protein	2.97	VpsR(+)
VC0490	conserved hypothetical protein	2.21	
VC0603	conserved hypothetical protein	2.44	
VC0694	conserved hypothetical protein	0.49	
VC0702	conserved hypothetical protein	2.09	
VC0761	conserved hypothetical protein	2.04	
VC0872	conserved hypothetical protein	2.01	
VC0873	conserved hypothetical protein	4.82	σ^E (-)
VC1131	conserved hypothetical protein	0.34	
VC1306	conserved hypothetical protein	2.18	σ^E (-)
VC1421	conserved hypothetical protein	0.48	
VC1497	conserved hypothetical protein	3.10	
VC1503	conserved hypothetical protein	0.47	

VC1567	conserved hypothetical protein	4.16	
VC1576	conserved hypothetical protein	2.68	
VC1701	conserved hypothetical protein	7.04	VpsR(+)
VC1841	conserved hypothetical protein	0.46	
VC1842	conserved hypothetical protein	0.48	
VC1851	conserved hypothetical protein	0.44	
VC1884	conserved hypothetical protein	2.09	
VC1937	conserved hypothetical protein	2.00	VpsR(+)
VC1957	conserved hypothetical protein	2.79	σ^E (+)
VC1978	conserved hypothetical protein	2.02	
VC1986	conserved hypothetical protein	2.46	
VC2146	conserved hypothetical protein	2.22	
VC2164	conserved hypothetical protein	2.83	
VC2206	conserved hypothetical protein	0.46	
VC2253	conserved hypothetical protein	2.12	
VC2441	conserved hypothetical protein	0.43	
VC2471	conserved hypothetical protein	0.47	
VC2473	conserved hypothetical protein	4.35	
VC2517	conserved hypothetical protein	2.70	σ^E (-)
VC2518	conserved hypothetical protein	2.78	σ^E (-)
VC2548	conserved hypothetical protein	2.25	σ^E (-)
VC2716	conserved hypothetical protein	2.24	
VCA0094	conserved hypothetical protein	2.61	
VCA0167	conserved hypothetical protein	2.06	VpsR(+)
VCA0171	conserved hypothetical protein	2.77	
VCA0172	conserved hypothetical protein	3.31	
VCA0174	conserved hypothetical protein	2.48	σ^E (+)
VCA0323	conserved hypothetical protein	3.31	
VCA0536	conserved hypothetical protein	0.30	VpsR(-)
VCA0539	conserved hypothetical protein	2.06	
VCA0546	conserved hypothetical protein	0.45	
VCA0582	conserved hypothetical protein	0.42	
VCA0732	conserved hypothetical protein	20.14	σ^E (-)
VCA0931	conserved hypothetical protein	0.35	
VCA0948	conserved hypothetical protein	2.22	
VCA1004	conserved hypothetical protein	0.49	
VCA1065	conserved hypothetical protein	0.45	
VCA1085	conserved hypothetical protein	0.31	VpsR(-)
VCA0887	conserved hypothetical protein	2.97	VpsR(+)
VC1307	conserved hypothetical protein	2.73	
VC0104	hypothetical protein	2.00	
VC0132	hypothetical protein	3.56	
VC0189	hypothetical protein	2.32	
VC0301	hypothetical protein	2.17	
VC0314	hypothetical protein	2.03	
VC0713	hypothetical protein	2.67	
VC0860	hypothetical protein	2.41	
VC0862	hypothetical protein	0.43	
VC0955	hypothetical protein	0.50	
VC1007	hypothetical protein	0.27	

VC1080	hypothetical protein	0.12	VpsR(+)
VC1116	hypothetical protein	3.81	
VC1158	hypothetical protein	2.16	
VC1160	hypothetical protein	2.62	
VC1162	hypothetical protein	3.58	
VC1192	hypothetical protein	0.46	
VC1224	hypothetical protein	2.64	
VC1262	hypothetical protein	0.07	
VC1384	hypothetical protein	0.39	
VC1418	hypothetical protein	4.21	
VC1419	hypothetical protein	2.69	
VC1420	hypothetical protein	2.19	
VC1423	hypothetical protein	2.33	
VC1438	hypothetical protein	0.46	
VC1505	hypothetical protein	2.17	
VC1564	hypothetical protein	3.82	σ^E (+)
VC1572	hypothetical protein	2.71	
VC1613	hypothetical protein	0.41	
VC1637	hypothetical protein	7.21	σ^E (-)
VC1699	hypothetical protein	0.31	
VC1729	hypothetical protein	0.50	
VC1742	hypothetical protein	4.84	σ^E (+)
VC1743	hypothetical protein	7.40	σ^E (+)
VC1943	hypothetical protein	0.49	
VC1946	hypothetical protein	6.46	
VC2005	hypothetical protein	0.11	
VC2046	hypothetical protein	0.32	σ^E (+)
VC2058	hypothetical protein	0.48	
VC2189	hypothetical protein	0.15	
VC2205	hypothetical protein	0.48	
VC2207	hypothetical protein	0.18	
VC2208	hypothetical protein	0.44	
VC2212	hypothetical protein	2.04	σ^E (-)
VC2221	hypothetical protein	0.32	
VC2611	hypothetical protein	0.46	
VC2667	hypothetical protein	3.25	VpsR(+)
VC2717	hypothetical protein	0.21	
VCA0003	hypothetical protein	2.10	
VCA0081	hypothetical protein	2.60	
VCA0095	hypothetical protein	8.10	
VCA0096	hypothetical protein	6.58	
VCA0122	hypothetical protein	2.12	
VCA0125	hypothetical protein	3.45	
VCA0139	hypothetical protein	36.96	σ^E (-), VpsR(+)
VCA0162	hypothetical protein	0.38	
VCA0168	hypothetical protein	3.52	
VCA0169	hypothetical protein	2.04	
VCA0170	hypothetical protein	2.44	
VCA0195	hypothetical protein	0.43	VpsR(+)
VCA0224	hypothetical protein	3.29	

VCA0236	hypothetical protein	0.50	VpsR(-)
VCA0258	hypothetical protein	3.95	VpsR(+)
VCA0403	hypothetical protein	2.02	
VCA0434	hypothetical protein	0.41	σ^E (+)
VCA0551	hypothetical protein	3.43	σ^E (+)
VCA0567	hypothetical protein	2.20	
VCA0701	hypothetical protein	4.18	
VCA0721	hypothetical protein	3.19	σ^E (-), VpsR(+)
VCA0722	hypothetical protein	2.37	σ^E (-)
VCA0733	hypothetical protein	2.19	σ^E (-)
VCA0787	hypothetical protein	0.29	
VCA0845	hypothetical protein	4.96	σ^E (-), VpsR(+)
VCA0849	hypothetical protein	9.91	VpsR(+)
VCA0868	hypothetical protein	0.22	
VCA0882	hypothetical protein	2.55	
VCA0899	hypothetical protein	0.39	
VCA0916	hypothetical protein	2.69	
VCA0918	hypothetical protein	4.22	
VCA0962	hypothetical protein	10.70	σ^E (-)
VCA0966	hypothetical protein	3.29	σ^E (+), VpsR(+)
VCA0967	hypothetical protein	3.19	σ^E (+)
VCA0971	hypothetical protein	0.32	
VCA0976	hypothetical protein	2.79	VpsR(-)
VCA0997	hypothetical protein	0.35	
VCA1032	hypothetical protein	2.54	
VCA1075	hypothetical protein	0.36	VpsR(-)
VCA1076	hypothetical protein	0.23	
VCA1103	hypothetical protein	0.37	
VCA0494	hypothetical protein	0.22	

Others

VC0737	acetoin utilization protein AcuB_ putative	0.47	
VC1161	gonadoliberin III-related protein	2.32	σ^E (-)
VC1696	DNA-binding protein inhibitor Id-2-related protein	0.34	
VC1888	hemolysin-related protein	45.28	VpsR(+)
VC1935	CDP-diacylglycerol--glycerol-3-phosphate 3-phosphatidyltransferase-related protein	2.33	
VCA0907	heme-binding protein HutZ <i>hutZ</i>	3.49	
VCA0908	hutX protein <i>hutX</i>	2.92	VpsR(-)