Table S1. Bacterial strains, plasmids and oligonucleotides used in this study.

Strain or plasmid	Relevant characteristics[a]	Reference or source
Xanthomonas campestris* pv. *vesicatoria		
85-10	Pepper-race 2; wild type; Rif^R	(1)
85-10Δ*hrpX*	85-10 derivative deleted in *hrpX*; Rif^R	(2)
85-10Δ*sX12*	85-10 derivative deleted in *sX12*; Rif^R	This study
85*	85-10 derivative containing the *hrpG** mutation; Rif^R	(3)
Escherichia coli		
DH5α λpir	F^- *recA hsdR17(r_k^-,m_k^+) ϕ80dlacZ ΔM15 [λpir]*	(4)
TOP10	F^- *mcr*A Δ(*mrr-hsd*RMS-*mcr*BC) ϕ80*lacZ*ΔM15 Δ*lac*X74 *rec*A1 *ara*D139 Δ(*ara-leu*) 7697 *gal*U *gal*K *rps*L (Str^R) *end*A1 *nup*G	Invitrogen
TOP10F'	F'{*lac*I^q Tn*10* (Tet^R-)} *mcr*A Δ(*mrr-hsd*RMS-*mcr*BC) ϕ80*lac*ZΔM15Δ*lac*X74 *rec*A1 *ara*D139 Δ(*ara-leu*) 7697 *gal*U *gal*K *rps*L *end*A1 *nup*G	Invitrogen
Plasmids		
pBRM-P	Derivative of pBBR1MCS-5 without promoter; Gm^R	(5)
pBRM-sX6	pBRM-P derivative expressing c-Myc-epitope tagged sX6; Gm^R	This study
pCR 2.1-TOPO	General-purpose cloning vector; Ap^R Km^R	Invitrogen
pFG72-1	Derivative of pUFR043 containing *hrpG**; Km^R	(3)
pLAFR6	RK2 replicon, Mob^+ Tra^-; without promoter; multicloning site flanked by transcription terminators; Tc^R	(6)
p*sX12*	pLAFR6 derivative containing *sX12*; Tc^R	This study
pOK1	Suicide vector; *sacB sacQ mobRK2* oriR6K; Sm^R	(7)
pOKΔ*sX12*	pOK1 derivative containing flanking regions of *sX12*; Sm^R	This study
pRK2013	ColE1 replicon, $TraRK^+$ Mob^+; Km^R	(8)
Oligonucleotide	**Sequence (Purpose)**	**Gene**
NB76	CTGCGTGGAGTTTCTAGGCT (Northern blot probe)	*sX1*
NB2	GCTGCCTAGATGCTCTAGGG (Northern blot probe)	*sX2*
NB12	GTGGCGAGTAAGGCAAAAAG (Northern blot probe)	*sX3*
NB13	CAAATTGTTCAGGAACTTACGC (Northern blot probe)	*sX4*
NB81	GGACTTCGTAACGCAGGACT (Northern blot probe)	*sX5*
NB16	TCAGGATGTGCTTGAACTTCAT (Northern blot probe)	*sX6*
NB17	CTCCTGGCCTTCGATAGATCTA (Northern blot probe)	*sX7*
NB23	ACTAGGCGCATAAGTCGTTGTT (Northern blot probe)	*sX8*
NB25	ACATCACACCGCGACCAG (Northern blot probe)	*sX9*
NB28	CCGAAGGAGTGTTGTATTAGC (Northern blot probe)	*sX10*
NB31	AGTAGTAGGCTTGCTCAGAGCC (Northern blot probe)	*sX11*
NB42	TACCTTTCGACGAGGATGTG (Northern blot probe)	*sX12*
NB100	GAGAGATCTACCGACAGGCGT (Northern blot probe)	*sX13*
NB101	CACAGCTTCCGACTGACATC (Northern blot probe)	*sX14*
NB67	TTACCGATCGTCGTGTAGCTG (Northern blot probe)	*sX15*
NB30	TGGTCGTAATTAAGGGACAAG (Northern blot probe)	*6S*
NB55	CTACCGACCCTTACGCTACC (Northern blot probe)	*asX1*
NB89	CAGACCACCCAACAACCTTC (Northern blot probe)	*asX2*
NB45	GCCGAACTTACGTCCTTGTC (Northern blot probe)	*asX3*
NB98	CCAAAAACACGACTCAGTCG (Northern blot probe)	*asX4*
NB37	GATCAAACGAGTGGCTACTGTG (Northern blot probe)	*asX5*
NB66	AAACAGACCATGTGGCACATC (Northern blot probe)	*asX6*
NB72	CAGCTACACGACGATCGGTA (Northern blot probe)	*asX7*
NB-5S	CCTGGCGATGACCTACTCTC (Northern blot probe)	*5S rRNA*
5'_RNA-adapter	AUAUGCGCGAAUUCCUGUAGAACGAACACUAGAAGAAA (5' RACE; RNA-adapter)	
3'_RNA-adapter*	P-UUCACUGUUCUUAGCGGCCGCAUGCUC-idT* (3' RACE; RNA-adapter)	
5'-RACE-adapter	GCGCGAATTCCTGTAGA (5' RACE; adapter-specific primer)	
3'-RACE-adapter	CGGCCGCTAAGAACAG (3' RACE; adapter-specific primer)	
sX12-5'_RACE1	ACCTTTCGACGAGGATG (5' RACE; reverse transcription)	*sX12*
sX12-5'_RACE2	CGACGAGGATGTGCAG (5' RACE; PCR)	*sX12*
sX12-3'_RACE	TGCACATCCTCGTCGA (3' RACE; PCR)	*sX12*

Oligonucleotide	Sequence (Purpose)	Gene
asX4-5'RACE1	GAATCTGGTCACGACG (5' RACE; reverse transcription)	*asX4*
asX4-5'RACE2	TCTGGTCACGACGGTG (5' RACE; PCR)	*asX4*
asX4-3'RACE	GTCGTGACCAGATTCCTTGTCT (3' RACE; PCR)	*asX4*
pCR2.1_colo_fw	ACGACGTTGTAAAACGACGG (colony PCR)	
pCR2.1_colo_rev	TTCACACAGGAAACAGCTATGAC (colony PCR)	
pCR2.1_seq	CACAGGAAACAGCTATGAC (sequencing)	
ΔsX12-left-fwd	CAGGATCCATGATCAGGGTGTCGAGGTG (*sX12* deletion; left fragment)	*sX12*
ΔsX12-left-rev	AACAAGCTTATGACCTCTGCCGGTTGTCT (*sX12* deletion; left fragment)	*sX12*
ΔsX12-right-fwd	AACAAGCTTAATCGATTTCCCGGCTTG (*sX12* deletion; right fragment)	*sX12*
ΔsX12-right-rev	GCTCTAGAGTGGCGACCTGGTACTTCAG (*sX12* deletion; right fragment)	*sX12*
sX12-comp-fwd	CAGGATCCAACGGAGTTCAGCACTACGGT (complementation of Δ*sX12*)	*sX12*
sX12-comp-rev	AACAAGCTTCGAATTCTTGGAATGGTCA (complementation of Δ*sX12*)	*sX12*
sX6-fwd	TTTGGTCTCTATTCGCTGAGCCGATTTTTTGCAC (sX6-c-Myc tagging)	*sX6*
sX6-rev	TTTGGTCTCTCACCGCGTGCAGGCTTTTCTTCTTCC (sX6-c-Myc tagging)	*sX6*

[a], Ap, ampicillin; Gm, gentamycin; Km, kanamycin; Rif, rifampicin; Sm, spectinomycin; Tc, tetracycline. [R], resistance. Recognition sites of restriction enzymes are underlined.

*, RNA oligonucleotide carrying a phosphate modification at the 5' and an inverted deoxythymidine (idT) at the 3' end.

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Table S2. Classification of putative TSSs which were automatically identified in the *Xcv* genome [see Figure 1B and METHODS; (1)].

TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
22092#	+	0.0001	6	0	*XCVd0018*	29	-	-	-	-	-
22614#	-	0.0034	7	2	-	-	-	-	*XCVd0019*	28/478	-
24098#	-	0.0191	3	0	-	-	-	-	-	-	+
31729#	-	0.0071	7	0	-	-	-	-	-	-	+
54664#	-	0.0344	3	0	-	-	-	-	*XCVd0049*	81/1463	-
56391#	-	0.0000	72	14	-	-	-	-	-	-	+
63600#	+	0.0003	6	0	-	-	-	-	*XCVd0054*	572/930	-
76432#	-	0.0007	7	0	*XCVd0069*	24	-	-	-	-	-
81111#	-	0.0032	9	2	-	-	-	-	*XCVd0073*	701/681	-
81749#	-	0.0014	9	2	-	-	-	-	*XCVd0073*	1339/43	-
82121#	+	0.0018	5	1	*XCVd0074*	21	-	-	-	-	-
88062#	+	0.0024	4	0	-	-	*XCVd0079*	757/2551	-	-	-
90670#	+	0.0341	9	0	*XCVd0080*	50	-	-	-	-	-
94989#	+	0.0081	4	0	-	-	*XCVd0086*	82/1066	-	-	-
95432#	-	0.0000	21	1	-	-	-	-	*XCVd0086*	525/623	-
97457#	-	0.0064	6	1	-	-	-	-	*XCVd0087*	1099/1000	-
99301#	-	0.0172	4	0	-	-	*XCVd0089*	238/370	-	-	-
100770#	+	0.0000	20	2	-	-	*XCVd0091*	817/13	-	-	-
101600#	+	0.0145	5	0	*XCVd0093*	287	-	-	*XCVd0092*	52/706	-
101864#	+	0.0000	156	25	*XCVd0093*	23	-	-	-	-	-
103085#	+	0.0369	4	3	-	-	-	-	*XCVd0094*	894/170	-
104001#	-	0.0000	57	11	*XCVd0094*	22	-	-	-	-	-
109851#	+	0.0000	35	6	-	-	-	-	*XCVd0099*	1283/99	-
112115#	-	0.0104	5	0	*XCVd0101* *XCVd0102*	285 28	-	-	-	-	-
112250#	+	0.0000	41	11	*XCVd0103*	27	-	-	-	-	-
113697#	+	0.0159	3	1	-	-	-	-	*XCVd0104*	755/579	-
114827#	-	0.0000	11	0	-	-	*XCVd0105*	786/281	-	-	-
115639#	-	0.0000	33	4	*XCVd0105*	26	-	-	-	-	-
116378#	+	0.0000	80	8	*XCVd0107*	277	-	-	*XCVd0106*	31/486	-
117900#	+	0.0000	18	2	-	-	-	-	*XCVd0109*	740/180	-
117969#	+	0.0018	13	2	-	-	-	-	*XCVd0109*	671/249	-
118654#	+	0.0156	8	1	*XCVd0110*	201	-	-	*XCVd0109*	14/934	-
118665#	-	0.0000	54	9	*XCVd0109*	25	-	-	-	-	-
119469#	+	0.0018	5	1	*XCVd0112*	49	*XCVd0111*	375/41	-	-	-
120806#	+	0.0083	6	1	-	-	*XCVd0112*	1288/1684	-	-	-
120867#	-	0.0229	5	1	-	-	-	-	*XCVd0112*	1349/1623	-
123136#	+	0.0004	5	0	*XCVd0114*	218	*XCVd0113*	624/71	-	-	-
127227#	-	0.0439	4	2	-	-	-	-	*XCVd0115*	3019/62	-
127749#	-	0.0000	28	3	-	-	-	-	*XCVd0116*	275/1032	-
136150#	+	0.0027	3	0	-	-	*XCVd0125*	512/210	-	-	-
137519#	-	0.0000	15	0	*XCVd0126*	23	-	-	-	-	-
138153#	+	0.0020	5	0	-	-	-	-	*XCVd0127*	74/355	-
151691#	+	0.0026	4	0	-	-	-	-	*XCVd0144*	337/304	-
159251#	+	0.0000	49	5	*XCVd0153*	36	-	-	*XCVd0152*	71/2254	-
159633#	+	0.0158	3	0	-	-	*XCVd0153*	346/49	*XCVd0154*	409/74	-
164247#	-	0.0168	3	0	-	-	*XCVd0155*	1062/4193	-	-	-
169348#	+	0.0024	3	0	-	-	-	-	*XCVd0160* *XCVd0161*	98/667 249/104	-
180140#	+	0.0049	3	0	-	-	-	-	*XCVd0171*	604/86	-
182433#	-	0.0050	3	0	*XCVd0172*	62	-	-	-	-	-

[a], TSS position on the *Xcv* chromosome and the plasmid (pXCV183; marked with #), respectively. [b], p-value indicates the significance of the annotated TSS (see METHODS). [c], number of read starts at TSS position. [d], TSS classification and the corresponding CDS. [e], distance of the TSS to annotated start and stop codon of the corresponding CDS. [f], a TSS is classified as orphan (+) if it is neither classified as primary, internal nor antisense TSS.

TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
1404	+	0.0000	15	1	*XCV0002*	202	-	-	-	-	-
9520	+	0.0078	5	2	*XCV0007*	68	-	-	-	-	-
10034	+	0.0036	4	0	-	-	*XCV0007*	446/744	-	-	-
10857	+	0.0001	10	1	*XCV0008*	78	-	-	-	-	-
11675	-	0.0001	6	0	-	-	-	-	*XCV0009* *XCV0008*	17/775 740/72	-
15312	-	0.0000	12	0	*XCV0013* *XCV0014*	297 20	-	-	-	-	-
17027	+	0.0000	42	18	-	-	*XCV0016*	23/900	-	-	-
17192	-	0.0001	12	0	-	-	-	-	*XCV0016*	188/735	-
18468	+	0.0022	3	0	-	-	*XCV0017*	538/49	-	-	-
18664	-	0.0147	3	0	-	-	-	-	-	-	+
23398	+	0.0000	13	1	-	-	*XCV0022*	45/317	-	-	-
38760	-	0.0000	13	0	-	-	*XCV0035*	12/425	-	-	-
44970	-	0.0000	14	3	*XCV0037*	79	-	-	-	-	-
45473	+	0.0246	5	0	*XCV0039*	58	-	-	*XCV0038*	1/376	-
45497	-	0.0170	3	0	*XCV0038*	23	-	-	*XCV0039*	34/1308	-
46397	-	0.0101	3	0	-	-	-	-	*XCV0039*	866/408	-
47391	-	0.0063	6	0	*XCV0040*	22	-	-	-	-	-
52187	+	0.0170	3	1	*XCV0045*	22	-	-	-	-	-
60944	-	0.0066	4	0	*XCV0050*	66	-	-	*XCV0051*	98/1191	-
62304	+	0.0206	3	0	*XCV0052*	23	-	-	-	-	-
72269	+	0.0213	3	0	*XCV0061*	116	-	-	*XCV0060*	27/761	-
72322	-	0.0002	9	1	*XCV0060*	80	-	-	*XCV0061*	63/404	-
72626	+	0.0001	13	2	-	-	*XCV0061*	241/100	-	-	-
75816	-	0.0016	4	0	-	-	-	-	-	-	+
77193	-	0.0006	6	1	*XCV0064*	16	-	-	-	-	-
78522	+	0.0000	23	2	-	-	*XCV0066*	817/13	*XCV0067*	231/46	-
78978	-	0.0187	8	5	*XCV0067*	225	-	-	-	-	-
81973	-	0.0123	6	2	*XCV0069*	270	-	-	-	-	-
84253	-	0.0047	3	0	*XCV0072*	20	-	-	-	-	-
84514	+	0.0058	3	0	-	-	*XCV0073*	121/460	-	-	-
85087	+	0.0000	11	0	-	-	-	-	-	-	+
87652	+	0.0469	7	0	*XCV0077*	22	-	-	-	-	-
89289	+	0.0065	4	0	-	-	*XCV0078*	1122/2840	-	-	-
103766	+	0.0206	3	0	-	-	-	-	*XCV0088*	747/149	-
109502	-	0.0009	6	1	*XCV0092*	72	-	-	-	-	-
117077	-	0.0026	4	0	*XCV0099*	274	*XCV0100*	573/266	-	-	-
118296	-	0.0401	3	1	-	-	*XCV0101*	675/524	-	-	-
133989	+	0.0164	3	1	-	-	*XCV0117*	8/588	-	-	-
138711	+	0.0011	6	1	*XCV0120*	26	-	-	-	-	-
139008	+	0.0333	3	0	-	-	*XCV0120*	271/934	-	-	-
149036	+	0.0002	7	0	-	-	-	-	-	-	+
149533	-	0.0000	13	1	-	-	*XCV0125*	817/13	-	-	-
152067	-	0.0152	5	0	-	-	-	-	*XCV0128*	155/543	-
155750	+	0.0005	11	2	*XCV0131*	227	-	-	-	-	-
156627	-	0.0000	15	3	-	-	-	-	*XCV0132*	106/295	-
192866	-	0.0118	3	0	*XCV0160*	31	-	-	-	-	-
193010	+	0.0008	9	2	*XCV0161*	0	-	-	-	-	-
193630	+	0.0149	3	1	-	-	*XCV0161*	620/750	-	-	-
195442	-	0.0000	22	0	*XCV0162*	23	-	-	-	-	-
196578	+	0.0000	37	10	*XCV0164*	32	-	-	-	-	-
201827	-	0.0015	7	2	*XCV0168*	0	-	-	*XCV0169*	12/1352	-
201899	+	0.0000	16	1	-	-	*XCV0169*	84/1280	*XCV0168*	72/1250	-

[a], TSS position on the *Xcv* chromosome and the plasmid (pXCV183; marked with #), respectively. [b], p-value indicates the significance of the annotated TSS (see METHODS). [c], number of read starts at TSS position. [d], TSS classification and the corresponding CDS. [e], distance of the TSS to annotated start and stop codon of the corresponding CDS. [f], a TSS is classified as orphan (+) if it is neither classified as primary, internal nor antisense TSS.

TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
204493	+	0.0000	12	2	-	-	-	-	*XCV0172*	3775/71	-
208848	+	0.0338	4	0	-	-	*XCV0173*	420/248	-	-	-
212756	+	0.0000	8	0	*XCV0178*	116	*XCV0177*	396/116	-	-	-
217013	+	0.0021	4	0	-	-	*XCV0181*	424/562	-	-	-
217960	+	0.0416	7	4	*XCV0183*	22	-	-	-	-	-
220222	+	0.0000	11	0	*XCV0184*	23	-	-	-	-	-
222838	-	0.0000	17	0	*XCV0186*	21	-	-	-	-	-
224042	+	0.0000	15	2	*XCV0188*	35	-	-	-	-	-
225642	+	0.0161	4	2	*XCV0189*	118	-	-	-	-	-
237714	-	0.0365	4	1	*XCV0200*	47	-	-	-	-	-
238550	-	0.0323	7	0	*XCV0201*	0	-	-	*XCV0202*	57/1010	-
240862	+	0.0050	6	2	*XCV0205*	23	-	-	-	-	-
241374	+	0.0011	4	0	*XCV0206*	55	-	-	-	-	-
244105	-	0.0000	194	14	*XCV0208*	62	-	-	-	-	-
244587	+	0.0000	15	2	-	-	*XCV0209*	4/1204	-	-	-
250048	+	0.0221	3	0	-	-	-	-	*XCV0213*	484/535	-
252996	+	0.0000	19	1	-	-	-	-	*XCV0214*	72/2471	-
253127	-	0.0000	25	10	*XCV0214*	203	-	-	-	-	-
261157	+	0.0000	17	2	*XCV0221*	81	-	-	-	-	-
261741	-	0.0000	15	1	-	-	*XCV0222*	817/13	*XCV0221*	503/3	-
265771	-	0.0000	43	8	-	-	*XCV0226*	216/569	-	-	-
266587	-	0.0000	66	8	*XCV0227*	90	-	-	-	-	-
267156	+	0.0000	17	2	-	-	-	-	-	-	+
269292	+	0.0043	3	0	-	-	-	-	-	-	+
278015	-	0.0012	6	0	*XCV0236*	0	-	-	-	-	-
278867	+	0.0100	5	0	*XCV0238*	23	-	-	-	-	-
280390	+	0.0019	3	0	*XCV0240*	22	-	-	-	-	-
283462	+	0.0037	4	0	*XCV0243*	0	-	-	-	-	-
285329	+	0.0140	4	1	*XCV0244*	22	-	-	-	-	-
287897	-	0.0105	4	1	*XCV0246*	21	-	-	-	-	-
288111	+	0.0128	10	5	*XCV0247*	0	-	-	-	-	-
292756	+	0.0016	8	0	*XCV0252*	122	-	-	*XCV0251*	108/629	-
295006	+	0.0046	6	1	*XCV0255*	119	-	-	-	-	-
304274	+	0.0276	5	0	*XCV0264*	150	-	-	*XCV0263*	49/904	-
307776	+	0.0002	11	2	*XCV0266*	37	-	-	-	-	-
311632	-	0.0178	3	0	-	-	*XCV0268*	98/213	-	-	-
315387	-	0.0003	5	0	*XCV0270*	36	-	-	-	-	-
320398	+	0.0021	6	1	*XCV0274*	234	-	-	*XCV0273*	105/1055	-
321787	-	0.0437	7	0	-	-	-	-	*XCV0275* *XCV0276*	448/77 77/444	-
325673	+	0.0000	24	2	*XCV0281*	36	-	-	-	-	-
329286	-	0.0271	4	0	*XCV0283*	97	-	-	*XCV0284*	35/1287	-
331021	-	0.0263	6	1	-	-	*XCV0285*	933/278	-	-	-
331070	-	0.0003	10	1	-	-	*XCV0285*	884/327	-	-	-
332993	+	0.0000	9	1	*XCV0287*	0	-	-	*XCV0286*	67/939	-
337456	+	0.0001	13	3	*XCV0293*	22	-	-	-	-	-
338466	-	0.0057	5	2	-	-	*XCV0294*	940/259	-	-	-
341742	-	0.0051	5	2	*XCV0296*	23	-	-	-	-	-
341927	+	0.0000	12	0	*XCV0297*	26	-	-	-	-	-
344260	-	0.0000	27	4	*XCV0299*	26	-	-	-	-	-
347202	-	0.0014	4	0	-	-	*XCV0300*	99/2498	-	-	-
347842	-	0.0030	5	0	-	-	-	-	-	-	+
348352	+	0.0081	12	5	-	-	-	-	*XCV0302*	16/454	-
358119	-	0.0000	13	3	*XCV0313*	70	-	-	-	-	-

[a], TSS position on the *Xcv* chromosome and the plasmid (pXCV183; marked with #), respectively. [b], p-value indicates the significance of the annotated TSS (see METHODS). [c], number of read starts at TSS position. [d], TSS classification and the corresponding CDS. [e], distance of the TSS to annotated start and stop codon of the corresponding CDS. [f], a TSS is classified as orphan (+) if it is neither classified as primary, internal nor antisense TSS.

TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
369663	+	0.0028	3	0	-	-	*XCV0322*	30/833	-	-	-
375494	-	0.0081	3	0	-	-	*XCV0327*	24/425	*XCV0328*	90/1007	-
377721	+	0.0023	4	0	*XCV0330*	3	-	-	-	-	-
404292	-	0.0135	3	1	*XCV0352*	127	*XCV0353*	512/0	-	-	-
405223	-	0.0008	6	1	-	-	*XCV0354*	769/88	-	-	-
405567	+	0.0000	162	23	-	-	-	-	*XCV0354*	425/432	-
406317	-	0.0006	19	10	*XCV0355*	29	-	-	-	-	-
411941	+	0.0150	3	1	*XCV0359*	6	-	-	-	-	-
428338	-	0.0000	112	12	*XCV0374*	48	-	-	-	-	-
429323	-	0.0000	14	1	-	-	*XCV0375*	153/806	-	-	-
436669	+	0.0180	4	0	-	-	*XCV0383*	11/1368	-	-	-
441623	-	0.0130	4	0	-	-	*XCV0387*	26/879	-	-	-
441720	+	0.0000	11	0	*XCV0388*	30	-	-	*XCV0387*	71/976	-
447445	-	0.0001	6	2	*XCV0392*	52	-	-	-	-	-
448031	-	0.0000	12	2	*XCV0393*	23	-	-	-	-	-
448950	+	0.0098	3	0	*XCV0395*	226	*XCV0394*	784/172	-	-	-
449748	+	0.0205	5	1	*XCV0396*	23	-	-	-	-	-
453984	-	0.0000	24	7	-	-	*XCV0400*	168/758	-	-	-
455880	-	0.0012	5	1	*XCV0402*	24	-	-	-	-	-
458086	-	0.0001	6	0	-	-	-	-	-	-	+
462619	+	0.0014	4	0	-	-	-	-	*XCV0411*	2250/167	-
475337	-	0.0022	3	0	-	-	*XCV0425*	899/1020	-	-	-
477343	-	0.0002	8	0	*XCV0426*	25	-	-	-	-	-
477496	+	0.0000	22	3	*XCV0427*	37	-	-	-	-	-
485143	-	0.0000	13	0	-	-	-	-	*XCV0435*	1914/94	-
486264	-	0.0059	4	0	*XCV0436*	140	-	-	-	-	-
486511	+	0.0005	5	0	-	-	-	-	-	-	+
487914	-	0.0323	3	1	-	-	-	-	*XCV0437*	725/909	-
488081	+	0.0001	7	0	-	-	*XCV0437*	892/742	-	-	-
522402	-	0.0002	10	0	-	-	-	-	*XCV0462*	245/183	-
530343	+	0.0000	9	1	-	-	*XCV0468*	153/356	-	-	-
532431	-	0.0120	6	2	-	-	*XCV0470*	69/1289	-	-	-
532651	-	0.0025	5	0	*XCV0470*	151	-	-	-	-	-
532770	+	0.0009	8	1	*XCV0471*	0	-	-	-	-	-
533893	+	0.0033	6	0	-	-	-	-	*XCV0472*	302/36	-
537353	-	0.0066	4	0	*XCV0475*	32	*XCV0476*	1049/36	-	-	-
548017	+	0.0016	3	0	*XCV0483*	96	-	-	-	-	-
557964	+	0.0057	3	0	-	-	*XCV0493*	25/922	-	-	-
558968	-	0.0002	8	1	-	-	*XCV0494*	432/50	*XCV0493*	1029/82	-
568795	+	0.0038	5	1	*XCV0504*	27	-	-	-	-	-
573662	+	0.0040	3	0	*XCV0509*	53	*XCV0508*	156/50	-	-	-
581801	+	0.0005	4	0	*XCV0514*	94	-	-	-	-	-
585332	+	0.0311	8	5	*XCV0518*	0	*XCV0517*	790/4	-	-	-
586733	-	0.0003	8	0	-	-	*XCV0519*	327/362	-	-	-
587078	-	0.0000	62	8	*XCV0519*	18	-	-	-	-	-
587168	+	0.0000	39	0	*XCV0520*	30	-	-	-	-	-
587395	-	0.0439	3	0	-	-	-	-	*XCV0520*	197/594	-
589427	-	0.0000	10	0	-	-	*XCV0522*	42/650	-	-	-
589525	+	0.0000	73	23	*XCV0523*	85	-	-	*XCV0522*	56/748	-
590048	-	0.0012	10	0	-	-	-	-	*XCV0523* *XCV0524*	438/13 7/382	-
590956	+	0.0000	24	1	*XCV0525*	24	-	-	-	-	-
592178	+	0.0000	18	5	*XCV0527*	24	-	-	-	-	-
598012	-	0.0331	4	2	*XCV0531*	22	-	-	*XCV0532*	86/853	-

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599405	+	0.0000	18	5	*XCV0534*	0	-	-	-	-	-
602321	+	0.0000	16	1	-	-	*XCV0537*	36/887	-	-	-
605417	-	0.0000	11	1	-	-	-	-	-	-	+
616013	-	0.0182	4	0	*XCV0547*	25	-	-	*XCV0548*	49/663	-
616018	-	0.0369	3	0	*XCV0547*	30	-	-	*XCV0548*	44/658	-
624601	-	0.0081	3	1	*XCV0556*	46	-	-	-	-	-
629187	+	0.0177	3	1	*XCV0561*	39	-	-	-	-	-
633751	-	0.0002	8	2	*XCV0566*	21	-	-	-	-	-
636699	-	0.0000	7	0	-	-	*XCV0567*	194/2121	-	-	-
647837	+	0.0000	18	0	*XCV0574*	192	-	-	-	-	-
654736	+	0.0074	4	0	-	-	-	-	-	-	+
656637	+	0.0079	6	2	-	-	*XCV0579*	42/2822	-	-	-
660302	+	0.0000	12	2	-	-	-	-	-	-	+
660601	-	0.0000	8	0	-	-	-	-	*XCV0581*	42/1880	-
668117	-	0.0002	6	0	*XCV0586*	52	-	-	*XCV0587*	83/670	-
687581	+	0.0000	24	2	-	-	*XCV0608*	268/1051	-	-	-
689806	-	0.0185	11	0	-	-	-	-	*XCV0610*	760/772	-
690527	+	0.0000	15	4	*XCV0611*	54	*XCV0610*	1481/51	-	-	-
692255	+	0.0469	3	0	-	-	*XCV0611*	1674/1010	-	-	-
693668	+	0.0006	4	0	*XCV0612*	26	-	-	-	-	-
694560	-	0.0169	3	0	-	-	-	-	*XCV0612*	866/111	-
698328	+	0.0000	14	2	*XCV0616*	34	-	-	-	-	-
703418	-	0.0086	3	0	-	-	-	-	-	-	+
707695	+	0.0343	4	1	-	-	-	-	*XCV0625* *XCV0624*	838/8 79/258	-
707716	-	0.0000	13	1	*XCV0624*	100	*XCV0625*	817/13	-	-	-
713610	-	0.0193	3	0	-	-	*XCV0632*	9/1523	-	-	-
720541	-	0.0024	3	0	*XCV0639*	65	-	-	-	-	-
725332	+	0.0013	10	3	-	-	-	-	*XCV0642*	585/1994	-
732826	+	0.0424	4	0	-	-	*XCV0648*	43/334	-	-	-
736976	-	0.0027	3	0	-	-	*XCV0653*	8/789	-	-	-
738232	+	0.0005	12	4	*XCV0656*	25	-	-	-	-	-
739844	-	0.0122	3	0	-	-	*XCV0657*	862/121	-	-	-
740729	-	0.0000	12	2	*XCV0657*	23	-	-	-	-	-
749385	-	0.0005	6	1	-	-	*XCV0665*	168/956	-	-	-
752821	-	0.0000	16	1	*XCV0666*	23	-	-	-	-	-
758448	-	0.0056	5	0	*XCV0669*	34	-	-	-	-	-
758878	+	0.0469	7	0	-	-	-	-	*XCV0670*	1215/212	-
763156	+	0.0000	24	1	*XCV0673*	23	-	-	-	-	-
765474	+	0.0141	3	0	*XCV0675*	282	-	-	-	-	-
765583	+	0.0143	3	0	*XCV0675*	173	-	-	-	-	-
770365	+	0.0023	4	0	*XCV0679*	0	-	-	-	-	-
772840	+	0.0000	14	0	-	-	*XCV0681*	177/962	-	-	-
775297	-	0.0033	4	0	*XCV0683*	25	-	-	-	-	-
775992	+	0.0000	13	2	*XCV0685*	22	-	-	-	-	-
779535	-	0.0044	8	3	*XCV0686*	0	-	-	-	-	-
779651	+	0.0041	4	1	*XCV0687*	29	-	-	-	-	-
781259	-	0.0026	4	0	-	-	-	-	*XCV0687*	1579/490	-
782120	+	0.0002	7	0	*XCV0688*	0	-	-	-	-	-
782575	+	0.0000	13	2	*XCV0689*	244	-	-	-	-	-
785619	+	0.0000	18	2	*XCV0692*	17	-	-	-	-	-
793698	+	0.0000	11	1	*XCV0700*	23	-	-	-	-	-
799920	-	0.0039	6	2	-	-	*XCV0705*	769/88	*XCV0704*	942/49	-
800264	+	0.0000	162	23	-	-	-	-	*XCV0705*	425/432	-

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801014	-	0.0004	19	10	*XCV0706*	29	-	-	-	-	-
815890	+	0.0058	3	0	-	-	*XCV0717*	436/607	-	-	-
823961	+	0.0108	4	0	*XCV0723*	0	-	-	-	-	-
826922	+	0.0008	13	6	*XCV0725*	38	-	-	-	-	-
829714	+	0.0000	24	4	*XCV0728*	266	*XCV0727*	219/275	-	-	-
837085	-	0.0214	3	0	*XCV0733*	26	-	-	-	-	-
842923	+	0.0015	4	0	*XCV0739*	38	-	-	-	-	-
844848	+	0.0000	25	2	*XCV0741*	21	-	-	-	-	-
847069	+	0.0177	3	1	-	-	*XCV0743*	91/391	-	-	-
847628	+	0.0000	30	1	*XCV0744*	117	-	-	-	-	-
851592	+	0.0000	8	0	*XCV0747*	0	-	-	-	-	-
853751	+	0.0008	4	0	-	-	*XCV0749*	670/511	-	-	-
873841	+	0.0010	4	0	*XCV0767*	31	-	-	-	-	-
884284	-	0.0299	4	0	*XCV0773*	0	-	-	-	-	-
893392	+	0.0005	6	0	-	-	*XCV0781*	42/620	-	-	-
898261	-	0.0417	6	0	*XCV0784*	24	-	-	*XCV0785*	54/1151	-
900510	+	0.0380	4	0	-	-	*XCV0787*	97/292	-	-	-
905920	-	0.0007	5	0	*XCV0792*	60	-	-	-	-	-
906061	+	0.0000	16	3	*XCV0793*	24	-	-	-	-	-
906749	+	0.0000	10	0	*XCV0794*	31	-	-	-	-	-
907111	+	0.0010	5	0	-	-	*XCV0794*	331/919	-	-	-
907734	+	0.0007	6	0	-	-	*XCV0794*	954/296	-	-	-
931121	-	0.0030	3	0	-	-	*XCV0816*	41/324	-	-	-
933943	+	0.0000	86	27	-	-	-	-	-	-	+
935355	-	0.0000	11	1	*XCV0819* *XCV0820*	264 16	-	-	-	-	-
936154	-	0.0000	12	1	-	-	*XCV0821*	15/764	-	-	-
936452	+	0.0048	11	1	*XCV0822*	18	-	-	-	-	-
936455	+	0.0028	23	4	*XCV0822*	15	-	-	-	-	-
946406	+	0.0206	3	0	-	-	*XCV0830*	571/721	-	-	-
951830	+	0.0001	10	2	*XCV0835*	181	-	-	-	-	-
953433	+	0.0005	12	1	*XCV0836*	51	-	-	-	-	-
956025	+	0.0000	14	0	*XCV0839*	101	-	-	-	-	-
956388	+	0.0055	5	0	-	-	*XCV0839*	262/2473	-	-	-
959187	+	0.0001	9	2	*XCV0840*	0	-	-	-	-	-
963192	-	0.0156	3	1	*XCV0843*	22	-	-	-	-	-
963547	+	0.0026	4	0	*XCV0844*	20	-	-	-	-	-
964753	+	0.0000	15	1	*XCV0845*	31	-	-	-	-	-
973152	+	0.0000	80	8	-	-	-	-	-	-	+
973732	+	0.0349	3	0	-	-	*XCV0854*	279/650	-	-	-
976232	+	0.0206	3	0	-	-	-	-	*XCV0856*	647/792	-
977026	-	0.0014	5	0	*XCV0856*	147	-	-	-	-	-
994684	-	0.0007	4	0	*XCV0865*	33	-	-	-	-	-
997844	-	0.0000	21	0	*XCV0868*	0	-	-	-	-	-
1003187	-	0.0005	5	0	*XCV0871*	27	-	-	-	-	-
1017977	+	0.0000	67	8	*XCV0887*	22	-	-	-	-	-
1021354	+	0.0006	11	3	*XCV0890*	73	-	-	-	-	-
1024293	+	0.0000	11	2	*XCV0894*	27	-	-	-	-	-
1028253	-	0.0039	3	0	*XCV0899*	0	-	-	-	-	-
1029078	-	0.0008	5	0	*XCV0900*	0	-	-	-	-	-
1031658	-	0.0108	3	1	*XCV0902*	80	*XCV0903*	2346/80	-	-	-
1034027	-	0.0212	4	2	*XCV0903*	23	-	-	-	-	-
1036242	-	0.0129	5	0	*XCV0906*	23	-	-	-	-	-
1036560	+	0.0006	6	0	*XCV0907*	0	-	-	-	-	-

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1041488	-	0.0166	3	1	-	-	-	-	*XCV0911*	1007/21	-
1042407	+	0.0004	7	1	*XCV0913*	180	-	-	*XCV0912*	54/725	-
1050250	-	0.0003	6	0	-	-	*XCV0920*	152/429	-	-	-
1052158	-	0.0193	3	0	*XCV0922*	21	-	-	-	-	-
1052229	+	0.0095	4	1	*XCV0923*	32	-	-	*XCV0922*	92/994	-
1055953	-	0.0005	5	0	*XCV0926*	26	-	-	-	-	-
1059633	-	0.0003	12	3	*XCV0930*	23	-	-	-	-	-
1064780	+	0.0131	3	1	*XCV0937*	26	-	-	-	-	-
1067662	-	0.0119	3	0	-	-	*XCV0939*	104/861	-	-	-
1073410	+	0.0000	17	0	*XCV0945*	19	-	-	-	-	-
1086476	+	0.0025	4	0	-	-	*XCV0957*	74/585	-	-	-
1095646	-	0.0012	4	0	-	-	-	-	*XCV0965* *XCV0964*	12/1205 334/86	-
1102907	-	0.0272	3	1	*XCV0973*	0	-	-	-	-	-
1107405	+	0.0024	4	0	*XCV0977*	35	-	-	*XCV0976*	31/1326	-
1107410	-	0.0000	8	0	*XCV0976*	36	-	-	*XCV0977*	30/1715	-
1110383	+	0.0004	16	5	-	-	*XCV0979*	623/261	-	-	-
1114497	+	0.0001	8	0	-	-	-	-	-	-	+
1116481	+	0.0001	7	2	*XCV0986*	259	*XCV0985*	162/242	-	-	-
1117349	+	0.0000	9	1	*XCV0987*	147	-	-	-	-	-
1117882	+	0.0012	7	2	*XCV0988*	46	*XCV0987*	386/39	-	-	-
1118456	+	0.0303	5	0	-	-	*XCV0988*	528/167	-	-	-
1118678	+	0.0000	46	10	-	-	-	-	-	-	+
1120586	+	0.0007	4	1	-	-	*XCV0991*	172/3976	-	-	-
1122235	+	0.0042	3	1	-	-	*XCV0991*	1821/2327	-	-	-
1122779	+	0.0000	26	1	-	-	*XCV0991*	2365/1783	-	-	-
1128623	+	0.0074	5	1	-	-	*XCV0992*	3957/254	-	-	-
1129024	+	0.0000	10	1	*XCV0993*	75	-	-	-	-	-
1130406	+	0.0005	5	0	-	-	*XCV0995*	315/1799	-	-	-
1134713	-	0.0133	3	0	-	-	-	-	-	-	+
1135113	+	0.0030	15	12	-	-	-	-	-	-	+
1137159	+	0.0000	79	14	*XCV1002*	180	*XCV1001*	130/166	-	-	-
1137964	+	0.0008	9	2	*XCV1003*	209	*XCV1002*	625/199	-	-	-
1142119	+	0.0000	38	13	*XCV1013*	108	-	-	-	-	-
1146342	+	0.0000	37	12	-	-	-	-	-	-	+
1149059	+	0.0004	4	1	*XCV1024*	233	*XCV1023*	946/49	-	-	-
1149619	+	0.0026	3	0	*XCV1025*	180	*XCV1024*	327/53	-	-	-
1150093	+	0.0000	44	3	*XCV1026*	23	*XCV1025*	294/17	-	-	-
1153493	+	0.0000	10	1	*XCV1028*	17	-	-	-	-	-
1160474	-	0.0000	13	2	*XCV1032*	43	-	-	-	-	-
1160640	+	0.0000	20	1	*XCV1033*	33	-	-	-	-	-
1162992	-	0.0000	35	12	*XCV1035*	22	-	-	-	-	-
1164003	-	0.0006	5	0	*XCV1036*	163	-	-	-	-	-
1168793	+	0.0000	17	8	*XCV1042*	80	-	-	-	-	-
1169205	+	0.0000	19	3	-	-	*XCV1042*	332/762	-	-	-
1170131	+	0.0000	16	0	*XCV1043*	32	-	-	-	-	-
1173134	-	0.0006	5	0	*XCV1046*	22	-	-	-	-	-
1177286	+	0.0126	3	0	*XCV1051*	145	-	-	-	-	-
1179872	-	0.0114	5	2	*XCV1052*	40	-	-	-	-	-
1184957	+	0.0000	12	1	*XCV1055*	25	-	-	-	-	-
1185123	-	0.0387	7	2	-	-	-	-	*XCV1055*	141/491	-
1189664	+	0.0048	5	0	*XCV1060*	99	-	-	-	-	-
1190312	+	0.0006	8	2	*XCV1061*	228	*XCV1060*	549/194	-	-	-
1206581	-	0.0144	3	0	-	-	*XCV1073*	42/1661	*XCV1074*	99/437	-

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TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
1206687	+	0.0000	11	1	-	-	*XCV1074*	7/331	*XCV1073*	64/1767	-
1207568	+	0.0000	8	0	*XCV1076*	72	-	-	-	-	-
1209562	-	0.0027	5	0	*XCV1077*	20	-	-	-	-	-
1209662	+	0.0017	10	0	-	-	-	-	-	-	+
1217572	+	0.0134	3	1	-	-	*XCV1083*	1641/827	-	-	-
1218498	+	0.0000	46	8	*XCV1084*	118	-	-	-	-	-
1219137	-	0.0112	3	0	-	-	-	-	-	-	+
1219503	+	0.0007	6	1	*XCV1085*	25	-	-	-	-	-
1223677	-	0.0046	3	0	-	-	*XCV1087*	426/338	-	-	-
1226768	-	0.0027	5	1	*XCV1091*	27	-	-	-	-	-
1227290	+	0.0000	10	0	-	-	*XCV1092*	172/1306	-	-	-
1233373	+	0.0000	19	2	-	-	*XCV1098*	817/13	-	-	-
1233578	+	0.0000	28	5	-	-	-	-	-	-	+
1235373	+	0.0020	5	1	-	-	-	-	-	-	+
1240320	+	0.0038	6	1	*XCV1107*	20	-	-	-	-	-
1242175	-	0.0000	91	11	-	-	-	-	-	-	+
1244521	-	0.0000	16	1	*XCV1110*	22	-	-	-	-	-
1249118	+	0.0002	20	9	*XCV1118*	29	*XCV1117*	910/16	-	-	-
1249868	-	0.0000	170	21	-	-	-	-	*XCV1119*	425/432	-
1250212	+	0.0041	5	1	*XCV1120*	153	*XCV1119*	769/88	-	-	-
1257067	-	0.0053	3	0	-	-	*XCV1126*	180/1334	-	-	-
1257541	+	0.0001	14	4	*XCV1127*	21	-	-	-	-	-
1261798	-	0.0002	16	6	*XCV1131*	65	*XCV1132*	1884/65	-	-	-
1265655	-	0.0171	3	1	*XCV1134*	0	-	-	*XCV1135*	40/1807	-
1270936	+	0.0000	47	4	-	-	*XCV1141*	37/517	-	-	-
1272952	-	0.0053	3	0	-	-	-	-	-	-	+
1273770	+	0.0000	36	10	*XCV1145*	23	-	-	-	-	-
1278951	+	0.0001	8	0	*XCV1150*	29	-	-	-	-	-
1284606	-	0.0088	4	1	-	-	*XCV1155*	27/1619	-	-	-
1287704	+	0.0032	3	0	-	-	*XCV1158*	694/1897	-	-	-
1295774	+	0.0131	4	1	*XCV1164*	42	*XCV1163*	308/12	-	-	-
1298129	-	0.0224	3	0	-	-	-	-	*XCV1164*	2313/2585	-
1309475	+	0.0005	8	1	*XCV1172*	65	-	-	*XCV1171*	98/196	-
1312832	+	0.0002	9	0	*XCV1175*	61	-	-	-	-	-
1321929	-	0.0414	5	0	*XCV1181*	22	-	-	*XCV1182*	50/637	-
1340207	+	0.0008	6	1	*XCV1198*	233	*XCV1197*	282/212	-	-	-
1343656	+	0.0005	5	0	*XCV1202*	63	-	-	-	-	-
1364483	+	0.0191	5	2	*XCV1217*	20	-	-	-	-	-
1368267	-	0.0345	6	3	*XCV1221* *XCV1222*	249 19	-	-	-	-	-
1376702	+	0.0016	8	2	-	-	*XCV1228*	90/857	-	-	-
1381773	+	0.0121	3	0	*XCV1232*	23	-	-	-	-	-
1384583	-	0.0028	7	2	*XCV1233*	20	-	-	-	-	-
1384820	+	0.0000	17	3	*XCV1234*	46	-	-	-	-	-
1386923	+	0.0068	3	0	-	-	*XCV1236*	66/1907	-	-	-
1390988	-	0.0193	3	0	-	-	*XCV1239*	35/150	-	-	-
1399557	-	0.0435	4	2	*XCV1243*	291	-	-	-	-	-
1404809	+	0.0275	3	0	*XCV1247*	89	-	-	-	-	-
1411639	-	0.0000	18	4	*XCV1251*	22	-	-	-	-	-
1419087	+	0.0005	8	1	*XCV1260*	0	-	-	*XCV1259*	78/833	-
1421227	+	0.0000	11	0	*XCV1262*	48	-	-	-	-	-
1424474	-	0.0060	4	0	*XCV1265*	171	-	-	-	-	-
1426111	-	0.0236	10	0	*XCV1268*	21	-	-	-	-	-
1429267	-	0.0016	4	0	*XCV1271*	24	-	-	-	-	-

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1433010	-	0.0000	18	5	*XCV1275*	29	-	-	-	-	-
1436219	-	0.0000	8	0	*XCV1279*	24	-	-	-	-	-
1437031	+	0.0023	6	0	*XCV1281*	28	-	-	*XCV1280*	4/763	-
1437682	-	0.0023	3	0	-	-	*XCV1282*	365/36	-	-	-
1440046	-	0.0054	3	0	-	-	*XCV1283*	964/1996	-	-	-
1441077	-	0.0028	5	0	*XCV1283*	67	-	-	-	-	-
1443612	-	0.0000	49	7	*XCV1287*	41	-	-	-	-	-
1443614	-	0.0007	48	7	*XCV1287*	43	-	-	-	-	-
1445416	+	0.0000	17	4	*XCV1289*	51	-	-	-	-	-
1450021	+	0.0001	8	1	*XCV1292*	0	-	-	-	-	-
1451420	+	0.0001	14	1	-	-	-	-	-	-	+
1451553	+	0.0055	10	2	-	-	-	-	-	-	+
1454260	-	0.0125	3	1	-	-	-	-	*XCV1295*	821/15	-
1456955	+	0.0000	37	0	*XCV1299*	25	-	-	-	-	-
1457771	+	0.0000	12	2	-	-	*XCV1299*	791/84	-	-	-
1458095	-	0.0000	15	1	-	-	*XCV1300*	819/11	-	-	-
1460678	+	0.0000	9	0	-	-	-	-	*XCV1303*	554/672	-
1461842	-	0.0113	3	1	*XCV1304*	23	-	-	-	-	-
1463947	-	0.0002	7	1	*XCV1306*	112	-	-	-	-	-
1464022	+	0.0151	9	0	-	-	-	-	-	-	+
1464279	+	0.0000	107	6	*XCV1307*	118	-	-	-	-	-
1464610	+	0.0122	3	0	-	-	*XCV1307*	213/719	-	-	-
1468435	+	0.0000	36	10	*XCV1311*	30	-	-	-	-	-
1470573	+	0.0005	6	0	*XCV1312*	22	-	-	-	-	-
1498473	-	0.0002	8	0	-	-	*XCV1332*	8/3195	-	-	-
1498586	+	0.0000	18	3	*XCV1333*	21	-	-	-	-	-
1502160	+	0.0000	15	3	*XCV1336*	21	-	-	-	-	-
1504286	-	0.0000	15	0	*XCV1337*	0	-	-	-	-	-
1504669	+	0.0019	5	1	*XCV1338*	28	-	-	-	-	-
1506240	+	0.0023	7	2	*XCV1339*	21	-	-	-	-	-
1508171	+	0.0000	62	7	*XCV1342*	45	-	-	-	-	-
1508253	-	0.0275	8	0	-	-	-	-	*XCV1342*	37/217	-
1508464	+	0.0113	6	1	*XCV1343*	23	*XCV1342*	248/6	-	-	-
1509902	+	0.0000	34	3	*XCV1345*	97	-	-	-	-	-
1529221	+	0.0200	8	0	-	-	*XCV1357*	388/1945	-	-	-
1543610	+	0.0094	6	0	-	-	*XCV1365*	301/493	-	-	-
1546532	+	0.0000	41	11	*XCV1368*	22	-	-	-	-	-
1549846	-	0.0000	19	0	*XCV1369*	30	-	-	-	-	-
1549864	+	0.0081	6	1	*XCV1370*	189	-	-	*XCV1369*	48/2126	-
1550020	+	0.0162	5	1	*XCV1370*	33	-	-	-	-	-
1553394	+	0.0000	25	3	*XCV1373*	50	-	-	-	-	-
1555991	+	0.0086	7	2	*XCV1375*	180	*XCV1374*	651/146	-	-	-
1567734	+	0.0048	3	0	*XCV1387*	38	*XCV1386*	1047/35	-	-	-
1573503	-	0.0021	3	0	-	-	*XCV1393*	482/2016	-	-	-
1580759	-	0.0050	6	1	*XCV1399*	248	*XCV1400*	322/16	-	-	-
1581048	-	0.0441	5	1	-	-	*XCV1400*	33/305	-	-	-
1582399	-	0.0000	14	2	*XCV1401*	20	-	-	-	-	-
1582406	+	0.0046	5	1	*XCV1402*	128	-	-	*XCV1401*	27/1199	-
1589016	+	0.0002	9	1	*XCV1406*	69	-	-	-	-	-
1589822	+	0.0000	10	1	*XCV1408*	22	-	-	-	-	-
1590522	-	0.0020	3	0	-	-	*XCV1409*	338/225	-	-	-
1591652	-	0.0054	5	1	*XCV1410*	154	-	-	-	-	-
1593751	-	0.0000	7	0	*XCV1413*	68	-	-	-	-	-
1595169	+	0.0009	7	0	*XCV1415*	21	-	-	*XCV1414*	76/1140	-

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1601206	+	0.0360	5	2	*XCV1423* *XCV1424*	0 264	-	-	-	-	-
1601450	+	0.0022	5	0	*XCV1424*	20	-	-	-	-	-
1609450	+	0.0000	17	0	-	-	-	-	*XCV1430*	151/391	-
1614026	-	0.0069	3	0	-	-	*XCV1434*	128/1002	-	-	-
1618771	-	0.0010	5	1	*XCV1440*	52	-	-	-	-	-
1618915	+	0.0038	4	0	-	-	-	-	*XCV1441*	2116/35	-
1624149	-	0.0192	5	0	-	-	-	-	*XCV1446*	1/678	-
1629856	-	0.0009	5	0	*XCV1450*	22	-	-	-	-	-
1631636	-	0.0147	3	0	*XCV1452*	8	-	-	-	-	-
1631992	+	0.0137	3	1	*XCV1453*	10	-	-	-	-	-
1639397	+	0.0060	4	1	*XCV1459*	28	-	-	*XCV1458*	46/645	-
1641414	-	0.0122	3	0	*XCV1461*	44	-	-	-	-	-
1642409	-	0.0000	20	5	*XCV1462*	22	-	-	-	-	-
1644256	-	0.0088	3	0	-	-	*XCV1463*	1905/1682	-	-	-
1648431	-	0.0007	5	0	-	-	*XCV1465*	8/1308	-	-	-
1653692	-	0.0000	18	6	*XCV1470*	209	*XCV1471*	1221/122	-	-	-
1658315	-	0.0000	49	5	*XCV1475*	25	-	-	-	-	-
1659232	-	0.0166	3	1	*XCV1476*	32	-	-	-	-	-
1659403	+	0.0034	4	0	-	-	-	-	*XCV1477*	1427/93	-
1660847	-	0.0038	6	2	*XCV1477*	17	-	-	-	-	-
1663194	-	0.0000	15	4	*XCV1479*	242	-	-	-	-	-
1669473	+	0.0000	12	1	*XCV1485*	0	-	-	-	-	-
1676072	+	0.0012	7	0	*XCV1490*	220	-	-	-	-	-
1684643	+	0.0000	70	11	*XCV1495*	21	-	-	-	-	-
1690056	+	0.0113	4	0	*XCV1499*	63	-	-	*XCV1498*	51/899	-
1690128	+	0.0290	3	0	-	-	*XCV1499*	9/437	-	-	-
1700939	-	0.0019	3	0	*XCV1506*	26	-	-	*XCV1507*	39/1895	-
1702829	+	0.0009	5	0	*XCV1508*	16	*XCV1507*	1929/5	-	-	-
1704019	-	0.0037	4	0	*XCV1509*	69	-	-	-	-	-
1704140	+	0.0005	8	1	*XCV1510*	38	-	-	-	-	-
1708364	-	0.0001	18	7	*XCV1513*	70	-	-	-	-	-
1710153	-	0.0031	3	0	*XCV1515*	25	-	-	-	-	-
1712207	-	0.0034	4	0	*XCV1516*	0	-	-	-	-	-
1712476	+	0.0277	4	2	*XCV1517*	30	-	-	-	-	-
1719682	+	0.0000	20	2	*XCV1525*	0	-	-	*XCV1524*	75/500	-
1721663	+	0.0000	20	5	*XCV1528*	34	-	-	-	-	-
1724343	-	0.0193	3	0	-	-	-	-	*XCV1530*	504/1025	-
1726530	+	0.0027	3	0	*XCV1532*	29	-	-	-	-	-
1733457	+	0.0000	12	2	*XCV1537*	39	-	-	-	-	-
1736086	+	0.0264	3	0	*XCV1539*	131	-	-	*XCV1538*	1/1030	-
1745530	+	0.0024	3	0	-	-	*XCV1545*	189/41	-	-	-
1750856	+	0.0000	21	2	-	-	*XCV1551*	817/13	*XCV1552*	537/46	-
1753470	-	0.0000	31	1	-	-	-	-	-	-	+
1756674	+	0.0000	18	6	*XCV1557*	73	-	-	*XCV1556*	12/488	-
1756686	-	0.0000	27	2	*XCV1556*	0	-	-	*XCV1557*	61/489	-
1758176	-	0.0000	17	1	*XCV1559*	24	-	-	*XCV1560*	81/488	-
1758200	+	0.0493	3	0	*XCV1560*	57	-	-	*XCV1559*	48/440	-
1762031	+	0.0060	8	4	*XCV1563*	36	-	-	-	-	-
1762679	+	0.0002	7	1	*XCV1564*	48	-	-	-	-	-
1768866	-	0.0152	5	0	-	-	*XCV1568*	81/197	-	-	-
1778677	-	0.0061	3	0	-	-	*XCV1576*	903/536	-	-	-
1779063	-	0.0195	3	0	-	-	*XCV1576*	517/922	-	-	-
1783856	-	0.0000	18	5	-	-	*XCV1578*	65/2904	-	-	-

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1783909	+	0.0004	5	0	-	-	-	-	*XCV1578* *XCV1579*	12/2957 978/52	-
1788756	-	0.0008	4	0	*XCV1582*	28	-	-	*XCV1583*	7/1117	-
1791356	-	0.0000	13	0	*XCV1584*	147	-	-	-	-	-
1793470	-	0.0004	7	0	-	-	*XCV1586*	5/441	-	-	-
1797706	-	0.0000	9	0	*XCV1591*	280	-	-	-	-	-
1798406	+	0.0000	19	7	*XCV1593*	47	-	-	-	-	-
1803085	+	0.0019	5	1	*XCV1598*	11	-	-	-	-	-
1814647	+	0.0433	9	0	-	-	*XCV1606*	149/1542	-	-	-
1816736	+	0.0000	17	0	*XCV1607*	1	-	-	-	-	-
1819516	+	0.0183	3	0	*XCV1608*	23	-	-	-	-	-
1820299	+	0.0000	12	0	*XCV1609*	22	-	-	-	-	-
1821313	+	0.0001	9	1	-	-	*XCV1610*	140/3054	-	-	-
1825238	-	0.0001	8	1	-	-	*XCV1611*	6/632	-	-	-
1830728	-	0.0186	3	0	-	-	*XCV1617*	37/1051	-	-	-
1833891	+	0.0000	87	4	-	-	*XCV1620*	63/338	-	-	-
1838797	+	0.0000	40	12	*XCV1626*	51	-	-	-	-	-
1843191	+	0.0014	5	0	*XCV1631*	0	-	-	*XCV1630*	24/596	-
1859472	-	0.0028	7	2	*XCV1646*	0	-	-	-	-	-
1859602	+	0.0008	6	1	*XCV1647*	26	-	-	-	-	-
1864572	+	0.0002	7	0	-	-	*XCV1654*	8/699	-	-	-
1868556	-	0.0000	40	4	*XCV1659*	30	-	-	-	-	-
1868712	+	0.0002	7	1	*XCV1660*	19	-	-	-	-	-
1874518	+	0.0001	15	4	*XCV1665*	38	-	-	-	-	-
1875752	-	0.0005	6	0	-	-	-	-	*XCV1666*	458/78	-
1880820	-	0.0193	3	0	-	-	-	-	*XCV1669* *XCV1670*	1001/42 70/753	-
1882951	+	0.0000	12	3	*XCV1672*	98	-	-	-	-	-
1895289	-	0.0047	5	1	*XCV1679*	25	-	-	*XCV1680*	36/1403	-
1895299	+	0.0072	4	0	*XCV1680*	26	-	-	*XCV1679*	35/1237	-
1900120	-	0.0065	5	1	*XCV1684*	90	-	-	-	-	-
1903361	+	0.0000	26	5	*XCV1689*	21	-	-	-	-	-
1908861	-	0.0008	5	0	*XCV1693*	19	-	-	*XCV1694*	93/1370	-
1908930	+	0.0000	31	1	*XCV1694*	24	-	-	*XCV1693*	88/756	-
1911229	+	0.0005	7	1	*XCV1696*	12	-	-	*XCV1695*	89/670	-
1912983	+	0.0148	3	1	-	-	*XCV1697*	180/1178	-	-	-
1914145	+	0.0003	19	9	*XCV1698*	113	*XCV1697*	1342/16	-	-	-
1914895	-	0.0000	170	21	-	-	-	-	*XCV1699*	425/432	-
1915239	+	0.0039	5	1	-	-	*XCV1699*	769/88	-	-	-
1921894	-	0.0000	44	2	-	-	*XCV1704*	297/491	-	-	-
1925949	+	0.0000	11	1	*XCV1707*	18	-	-	-	-	-
1938634	-	0.0204	3	1	*XCV1719*	95	-	-	-	-	-
1961959	+	0.0022	3	0	*XCV1741*	21	-	-	-	-	-
1964107	-	0.0151	3	0	-	-	*XCV1743*	400/937	-	-	-
1964739	+	0.0021	3	0	*XCV1744*	41	-	-	-	-	-
1966625	+	0.0056	3	0	*XCV1746*	28	-	-	-	-	-
1971387	-	0.0000	8	0	-	-	*XCV1748*	108/1910	-	-	-
1971505	+	0.0000	15	1	-	-	-	-	*XCV1748*	10/2028	-
1972062	+	0.0000	13	1	*XCV1749*	22	-	-	-	-	-
1974295	-	0.0437	7	0	-	-	-	-	*XCV1750*	326/501	-
1975236	+	0.0034	4	0	*XCV1752*	47	-	-	-	-	-
1976107	+	0.0055	5	0	-	-	*XCV1752*	824/465	-	-	-
1980337	+	0.0000	22	0	*XCV1758*	17	-	-	*XCV1757*	83/622	-
1984126	-	0.0005	4	0	*XCV1763*	24	-	-	*XCV1764*	42/671	-

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TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
1984810	+	0.0051	8	3	*XCV1765*	45	-	-	-	-	-
1988882	+	0.0042	9	2	*XCV1769* *XCV1768*	299 9	-	-	-	-	-
1989065	+	0.0275	4	0	*XCV1769*	116	*XCV1768*	174/101	-	-	-
1993650	+	0.0050	4	1	*XCV1772*	0	-	-	-	-	-
1996311	+	0.0230	7	3	*XCV1775*	74	-	-	-	-	-
1996655	+	0.0419	5	1	-	-	*XCV1775*	270/2375	-	-	-
1998924	+	0.0002	18	1	*XCV1776*	249	*XCV1775*	2539/106	-	-	-
1999090	+	0.0000	30	4	*XCV1776*	83	-	-	-	-	-
2011844	-	0.0138	4	0	*XCV1789*	264	*XCV1790*	374/249	-	-	-
2012054	-	0.0424	4	0	-	-	*XCV1790*	164/459	-	-	-
2014218	-	0.0000	15	3	*XCV1793*	19	-	-	-	-	-
2018225	+	0.0012	6	1	*XCV1798*	30	-	-	-	-	-
2041528	+	0.0004	8	2	*XCV1810*	30	-	-	-	-	-
2046892	-	0.0002	8	1	-	-	-	-	*XCV1814*	28/1392	-
2046910	+	0.0095	3	0	*XCV1814*	10	-	-	-	-	-
2048788	+	0.0014	5	1	*XCV1816*	24	-	-	-	-	-
2050617	+	0.0000	11	0	*XCV1818*	26	-	-	-	-	-
2056210	+	0.0105	3	0	*XCV1823*	3	-	-	-	-	-
2061162	+	0.0026	5	1	-	-	-	-	*XCV1825*	1738/259	-
2063383	+	0.0003	5	0	-	-	*XCV1826*	165/809	-	-	-
2064776	-	0.0056	3	0	-	-	*XCV1827*	166/397	-	-	-
2066165	-	0.0265	6	3	*XCV1828*	0	-	-	-	-	-
2066489	+	0.0029	7	0	*XCV1829*	0	-	-	-	-	-
2076935	-	0.0010	4	0	*XCV1838*	55	-	-	-	-	-
2077009	+	0.0344	6	0	-	-	-	-	-	-	+
2077238	+	0.0116	7	1	*XCV1839*	103	-	-	-	-	-
2078061	+	0.0225	4	1	-	-	-	-	*XCV1840*	838/8	-
2078080	-	0.0000	14	1	-	-	*XCV1840*	819/11	-	-	-
2080165	+	0.0001	20	9	*XCV1843*	29	-	-	*XCV1842*	17/930	-
2080915	-	0.0000	170	21	-	-	-	-	*XCV1844*	425/432	-
2081259	+	0.0038	5	1	*XCV1845*	156	*XCV1844*	769/88	-	-	-
2081955	+	0.0103	3	0	-	-	*XCV1845*	540/11	*XCV1846*	816/76	-
2088259	+	0.0013	5	0	*XCV1852*	36	-	-	-	-	-
2094165	+	0.0004	6	0	*XCV1859*	103	-	-	-	-	-
2100728	+	0.0004	5	0	-	-	*XCV1861*	3048/8078	-	-	-
2108278	-	0.0259	3	0	-	-	-	-	*XCV1861*	10598/528	-
2109973	+	0.0000	20	2	*XCV1864*	151	*XCV1863*	817/13	-	-	-
2111307	+	0.0000	17	4	*XCV1866*	226	-	-	-	-	-
2118507	-	0.0193	3	0	-	-	*XCV1871*	90/668	-	-	-
2118674	+	0.0000	9	0	*XCV1872*	31	-	-	*XCV1871*	77/835	-
2133276	-	0.0001	11	2	*XCV1886*	0	-	-	-	-	-
2134171	-	0.0080	5	0	-	-	*XCV1887*	625/802	-	-	-
2136428	-	0.0036	5	0	*XCV1888*	83	-	-	*XCV1889*	100/648	-
2136615	-	0.0356	4	0	*XCV1888*	270	-	-	*XCV1889*	87/461	-
2138655	+	0.0022	5	0	-	-	*XCV1891*	50/1437	-	-	-
2140105	+	0.0393	3	1	*XCV1892*	25	-	-	-	-	-
2149915	+	0.0034	11	0	-	-	*XCV1904*	174/1199	-	-	-
2153351	+	0.0000	33	2	*XCV1907*	111	-	-	-	-	-
2163985	+	0.0000	45	9	*XCV1915*	22	-	-	-	-	-
2171527	+	0.0078	4	1	-	-	-	-	*XCV1920*	303/563	-
2173745	-	0.0019	6	0	*XCV1921*	56	-	-	*XCV1922*	21/488	-
2173764	+	0.0177	3	1	-	-	*XCV1922*	40/469	*XCV1921*	75/1754	-
2177450	-	0.0000	7	0	*XCV1924*	34	-	-	-	-	-

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TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
2177544	+	0.0048	6	1	*XCV1926* *XCV1925*	265 20	-	-	-	-	-
2181033	+	0.0009	4	0	*XCV1928*	17	-	-	-	-	-
2185929	+	0.0206	3	0	-	-	-	-	*XCV1931*	407/186	-
2190346	-	0.0000	10	0	*XCV1934*	56	-	-	-	-	-
2191418	+	0.0014	4	0	-	-	-	-	*XCV1936*	728/54	-
2192469	+	0.0054	3	0	-	-	-	-	*XCV1937*	282/20	-
2201842	+	0.0206	3	0	-	-	-	-	*XCV1941*	2237/234	-
2221729	-	0.0018	3	0	-	-	*XCV1952*	1758/416	-	-	-
2226060	+	0.0031	3	0	-	-	-	-	*XCV1954*	1097/1173	-
2236742	-	0.0198	5	0	*XCV1962*	157	-	-	-	-	-
2239894	+	0.0087	3	0	-	-	*XCV1963*	2441/657	-	-	-
2245024	+	0.0000	19	2	-	-	*XCV1969*	817/13	-	-	-
2246333	+	0.0376	3	1	*XCV1972*	25	-	-	-	-	-
2247573	-	0.0193	3	0	-	-	-	-	*XCV1973*	582/893	-
2283523	-	0.0087	3	0	*XCV2000*	53	-	-	-	-	-
2298800	-	0.0002	6	0	*XCV2016*	37	-	-	-	-	-
2299637	-	0.0000	29	3	-	-	*XCV2017*	8/654	-	-	-
2303997	-	0.0000	15	1	*XCV2022*	88	-	-	-	-	-
2316851	-	0.0000	7	0	*XCV2034*	0	-	-	-	-	-
2317891	+	0.0138	4	1	*XCV2036*	22	-	-	-	-	-
2319528	+	0.0009	3	0	-	-	*XCV2038*	789/434	-	-	-
2331979	+	0.0000	28	2	-	-	*XCV2048*	60/323	-	-	-
2332427	+	0.0011	9	3	*XCV2049*	21	-	-	-	-	-
2332843	-	0.0400	4	0	-	-	-	-	*XCV2049*	395/1884	-
2332879	+	0.0100	5	0	-	-	*XCV2049*	431/1848	-	-	-
2335263	-	0.0000	35	5	*XCV2051*	40	-	-	-	-	-
2339189	-	0.0139	3	1	-	-	*XCV2055*	457/508	-	-	-
2339660	+	0.0000	10	1	*XCV2056*	270	-	-	*XCV2055*	14/979	-
2345698	+	0.0167	5	2	-	-	-	-	*XCV2059*	3686/477	-
2349615	+	0.0006	5	0	*XCV2060*	0	-	-	-	-	-
2350997	+	0.0135	5	2	*XCV2061*	171	-	-	-	-	-
2356401	+	0.0000	27	1	*XCV2066*	90	-	-	-	-	-
2358828	+	0.0000	30	1	*XCV2069*	108	*XCV2068*	677/108	-	-	-
2359054	+	0.0064	4	0	-	-	*XCV2069*	118/739	-	-	-
2359959	+	0.0145	11	6	-	-	*XCV2070*	92/543	-	-	-
2363433	+	0.0023	8	0	*XCV2073*	0	-	-	-	-	-
2363454	+	0.0023	8	0	-	-	*XCV2073*	21/1196	-	-	-
2368751	+	0.0309	4	0	-	-	*XCV2075*	2367/293	-	-	-
2373126	-	0.0028	4	0	*XCV2080*	22	-	-	-	-	-
2374746	+	0.0005	6	0	*XCV2083*	29	-	-	-	-	-
2382135	+	0.0134	3	0	*XCV2090*	23	-	-	*XCV2089*	58/1032	-
2384696	-	0.0077	4	0	-	-	-	-	*XCV2092*	15/1220	-
2393149	+	0.0000	29	5	*XCV2097*	35	-	-	-	-	-
2395930	+	0.0076	4	1	*XCV2101*	25	-	-	-	-	-
2396500	+	0.0018	5	0	-	-	*XCV2101*	545/150	-	-	-
2398280	-	0.0085	3	0	-	-	*XCV2102*	315/1493	-	-	-
2399163	+	0.0000	17	2	*XCV2103*	185	-	-	-	-	-
2400264	-	0.0193	3	0	-	-	-	-	*XCV2103*	916/9274	-
2411526	-	0.0190	3	0	*XCV2105*	0	-	-	-	-	-
2414657	-	0.0000	19	2	-	-	*XCV2107*	1507/1582	-	-	-
2476734	-	0.0043	4	0	-	-	-	-	*XCV2155*	1024/1990	-
2480236	-	0.0000	183	10	*XCV2156*	22	-	-	-	-	-
2480585	-	0.0122	5	1	-	-	*XCV2157*	769/88	-	-	-

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2480929	+	0.0000	162	23	-	-	-	-	*XCV2157*	425/432	-
2481679	-	0.0003	19	10	*XCV2158*	29	-	-	*XCV2159*	48/686	-
2483366	+	0.0000	12	0	-	-	*XCV2161*	708/938	-	-	-
2484379	-	0.0000	210	29	-	-	-	-	*XCV2161* *XCV2162*	1721/75 5/222	-
2485206	-	0.0008	5	0	*XCV2163*	45	-	-	-	-	-
2485799	+	0.0003	6	0	-	-	*XCV2165*	73/2704	-	-	-
2490307	-	0.0101	3	0	-	-	-	-	*XCV2166*	1804/247	-
2495693	-	0.0096	4	0	-	-	-	-	-	-	+
2499035	-	0.0056	8	2	*XCV2173*	21	-	-	*XCV2174*	76/978	-
2511922	-	0.0000	15	0	*XCV2183*	98	-	-	*XCV2184*	18/938	-
2523234	+	0.0469	7	0	-	-	*XCV2193*	308/1317	-	-	-
2529317	+	0.0002	6	0	*XCV2200*	43	-	-	-	-	-
2531282	-	0.0031	5	1	*XCV2201*	124	*XCV2202*	2254/121	-	-	-
2532845	-	0.0013	7	2	-	-	*XCV2202*	691/1684	-	-	-
2533596	-	0.0000	83	7	*XCV2202*	60	-	-	*XCV2203*	83/901	-
2534689	+	0.0009	11	4	*XCV2204*	0	-	-	-	-	-
2536986	+	0.0000	11	2	-	-	*XCV2207*	27/632	-	-	-
2537657	+	0.0000	11	0	*XCV2208*	19	-	-	-	-	-
2540067	+	0.0068	3	0	*XCV2210* *XCV2211*	22 228	-	-	-	-	-
2542431	+	0.0000	15	2	*XCV2214*	32	-	-	-	-	-
2548437	-	0.0272	6	0	*XCV2215*	25	-	-	-	-	-
2549014	-	0.0000	26	5	*XCV2216*	19	-	-	-	-	-
2552155	+	0.0018	5	0	*XCV2222*	125	*XCV2221*	185/54	-	-	-
2557002	-	0.0193	3	0	-	-	-	-	*XCV2230*	276/854	-
2570503	-	0.0055	3	0	-	-	*XCV2237*	457/1099	-	-	-
2573369	+	0.0000	65	12	*XCV2240* *XCV2241*	14 241	-	-	*XCV2239*	26/895	-
2573375	-	0.0408	4	2	*XCV2239*	32	-	-	*XCV2240*	8/175	-
2580164	+	0.0023	3	0	-	-	-	-	*XCV2250*	1090/29	-
2580190	-	0.0020	3	0	-	-	-	-	-	-	+
2583951	+	0.0000	19	5	*XCV2252*	149	*XCV2251*	2402/144	-	-	-
2589488	+	0.0004	7	1	-	-	*XCV2258*	81/1415	-	-	-
2590477	+	0.0005	5	0	-	-	*XCV2258*	1070/426	-	-	-
2595113	-	0.0028	5	1	-	-	*XCV2262*	769/88	*XCV2261*	1384/68	-
2595457	+	0.0000	162	23	-	-	-	-	*XCV2262*	425/432	-
2596207	-	0.0004	19	10	*XCV2263*	23	*XCV2264*	759/146	-	-	-
2608263	+	0.0000	52	5	*XCV2275*	22	-	-	-	-	-
2609179	-	0.0441	4	3	-	-	-	-	*XCV2275*	894/170	-
2610400	-	0.0000	108	15	*XCV2277*	23	-	-	-	-	-
2613410	+	0.0000	33	2	*XCV2280*	23	-	-	-	-	-
2613918	-	0.0087	4	0	-	-	-	-	*XCV2280*	485/588	-
2616298	-	0.0486	4	4	-	-	*XCV2283*	1577/546	-	-	-
2616321	+	0.0280	7	4	-	-	-	-	*XCV2283*	1554/569	-
2625423	+	0.0094	3	0	-	-	-	-	*XCV2290*	44/796	-
2629491	+	0.0001	20	9	*XCV2295*	29	-	-	*XCV2294*	88/345	-
2630241	-	0.0000	170	21	-	-	-	-	*XCV2296*	425/432	-
2630585	+	0.0061	5	1	*XCV2297*	207	*XCV2296*	769/88	-	-	-
2631345	+	0.0001	8	0	-	-	-	-	-	-	+
2631738	+	0.0076	5	1	*XCV2298*	211	-	-	-	-	-
2634620	-	0.0125	3	0	*XCV2299*	37	-	-	*XCV2300*	68/358	-
2642688	+	0.0005	12	4	*XCV2309*	26	-	-	-	-	-
2645525	+	0.0293	6	0	-	-	-	-	*XCV2311*	235/721	-

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TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
2646914	+	0.0085	3	0	*XCV2314*	1	-	-	-	-	-
2651289	-	0.0067	3	0	*XCV2319*	31	-	-	-	-	-
2651497	+	0.0000	151	12	-	-	*XCV2320*	11/780	-	-	-
2651654	+	0.0232	8	1	-	-	*XCV2320*	168/623	-	-	-
2652046	-	0.0009	6	1	-	-	-	-	*XCV2320*	560/231	-
2656549	+	0.0112	8	4	-	-	-	-	*XCV2325*	877/35	-
2656965	+	0.0000	12	0	-	-	-	-	*XCV2325*	461/381	-
2659679	+	0.0004	7	1	-	-	-	-	*XCV2329*	559/232	-
2660227	-	0.0000	151	14	-	-	*XCV2329*	11/780	*XCV2330*	10/501	-
2671874	+	0.0004	7	1	-	-	-	-	*XCV2340*	559/232	-
2672422	-	0.0000	151	14	-	-	*XCV2340* *XCV2341*	11/780 831/50	-	-	-
2676073	+	0.0000	17	4	*XCV2345*	205	*XCV2344*	9/209	-	-	-
2680420	+	0.0140	4	1	-	-	-	-	*XCV2350*	539/474	-
2680631	+	0.0092	3	0	-	-	-	-	*XCV2350*	328/685	-
2682681	-	0.0000	1040	80	*XCV2352*	34	-	-	*XCV2353*	69/860	-
2682761	+	0.0000	151	12	-	-	*XCV2353*	11/780	-	-	-
2683310	-	0.0014	6	1	-	-	-	-	*XCV2353*	560/231	-
2684765	+	0.0021	3	0	*XCV2355*	119	-	-	-	-	-
2694331	+	0.0395	7	0	-	-	-	-	*XCV2365*	346/145	-
2740409	+	0.0004	9	1	-	-	-	-	-	-	+
2740875	+	0.0037	7	3	-	-	-	-	-	-	+
2744537	-	0.0193	3	0	*XCV2419*	9	-	-	*XCV2420*	39/401	-
2744576	+	0.0318	7	4	*XCV2420*	0	-	-	*XCV2419*	48/488	-
2745041	+	0.0026	4	0	*XCV2421*	0	-	-	-	-	-
2751220	-	0.0000	33	2	-	-	-	-	*XCV2424*	30/1013	-
2756332	+	0.0000	14	3	*XCV2429*	0	-	-	*XCV2428*	89/442	-
2764488	+	0.0011	5	0	*XCV2434*	22	-	-	-	-	-
2767760	-	0.0000	8	1	*XCV2435*	187	-	-	-	-	-
2768957	+	0.0122	8	1	-	-	-	-	-	-	+
2768989	-	0.0017	10	3	-	-	-	-	*XCV2436*	1026/67	-
2770178	-	0.0242	5	0	*XCV2437*	22	-	-	-	-	-
2779019	+	0.0351	4	0	-	-	-	-	*XCV2445*	298/565	-
2780755	+	0.0206	3	0	-	-	-	-	*XCV2448*	701/321	-
2788996	+	0.0193	3	1	*XCV2461*	27	-	-	-	-	-
2798003	+	0.0002	20	9	*XCV2477*	29	-	-	*XCV2476*	49/789	-
2798753	-	0.0000	170	21	-	-	-	-	*XCV2478*	425/432	-
2799097	+	0.0038	5	1	-	-	*XCV2478*	769/88	*XCV2479*	274/68	-
2801025	+	0.0293	5	0	-	-	*XCV2482*	18/1007	-	-	-
2803434	-	0.0110	4	1	-	-	*XCV2484*	242/957	-	-	-
2803838	-	0.0000	24	7	*XCV2484*	162	-	-	-	-	-
2805975	-	0.0102	3	0	-	-	*XCV2486*	1154/300	-	-	-
2806891	-	0.0465	3	0	-	-	*XCV2486*	238/1216	-	-	-
2807153	-	0.0000	12	1	*XCV2486*	24	-	-	-	-	-
2811009	-	0.0111	3	1	*XCV2489*	296	*XCV2490*	771/119	-	-	-
2811397	-	0.0049	3	0	-	-	*XCV2490*	383/507	-	-	-
2811810	-	0.0000	28	1	*XCV2490*	30	*XCV2491*	1877/27	-	-	-
2813614	+	0.0206	3	0	-	-	-	-	*XCV2491* *XCV2492*	73/1831 1055/90	-
2817226	-	0.0044	9	9	-	-	*XCV2496*	1085/597	-	-	-
2818655	-	0.0000	20	5	-	-	*XCV2497*	522/158	-	-	-
2819280	+	0.0000	54	6	*XCV2498*	70	-	-	-	-	-
2819686	+	0.0000	11	0	*XCV2499*	31	-	-	-	-	-
2833387	-	0.0215	5	1	*XCV2509*	242	*XCV2510*	2840/135	-	-	-

[a], TSS position on the *Xcv* chromosome and the plasmid (pXCV183; marked with #), respectively. [b], p-value indicates the significance of the annotated TSS (see METHODS). [c], number of read starts at TSS position. [d], TSS classification and the corresponding CDS. [e], distance of the TSS to annotated start and stop codon of the corresponding CDS. [f], a TSS is classified as orphan (+) if it is neither classified as primary, internal nor antisense TSS.

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2837417	-	0.0039	7	2	*XCV2511*	34	-	-	-	-	-
2838360	-	0.0015	4	0	*XCV2514*	31	-	-	-	-	-
2838423	+	0.0000	16	1	-	-	-	-	*XCV2514*	94/390	-
2843234	-	0.0000	29	2	*XCV2518*	24	-	-	-	-	-
2843374	+	0.0051	8	0	*XCV2519*	0	-	-	-	-	-
2853818	+	0.0003	8	1	*XCV2531*	0	-	-	-	-	-
2859395	+	0.0011	5	1	-	-	*XCV2535*	11/1653	-	-	-
2865835	-	0.0152	5	0	*XCV2539*	37	-	-	-	-	-
2874392	-	0.0011	4	0	-	-	*XCV2546*	54/554	-	-	-
2880224	-	0.0000	36	5	*XCV2551*	264	-	-	-	-	-
2880816	-	0.0000	17	3	-	-	*XCV2552*	80/540	-	-	-
2880924	+	0.0000	9	0	*XCV2553*	15	-	-	*XCV2552*	28/648	-
2885613	-	0.0125	6	1	-	-	-	-	*XCV2557* *XCV2558*	622/43 46/336	-
2894891	+	0.0000	45	4	*XCV2568*	229	-	-	*XCV2567*	73/690	-
2894892	+	0.0006	30	0	*XCV2568*	228	-	-	*XCV2567*	74/691	-
2897112	-	0.0028	3	0	-	-	-	-	*XCV2569*	681/332	-
2897115	+	0.0019	3	0	-	-	*XCV2569*	684/329	-	-	-
2899257	+	0.0068	3	0	-	-	*XCV2571*	1189/478	-	-	-
2901871	-	0.0041	5	0	-	-	*XCV2574*	299/417	-	-	-
2905203	-	0.0074	4	0	*XCV2577*	95	-	-	*XCV2578*	8/1033	-
2910245	+	0.0043	4	0	*XCV2582*	71	-	-	*XCV2581*	47/808	-
2915414	-	0.0000	21	2	*XCV2586*	0	-	-	-	-	-
2915525	+	0.0037	5	1	*XCV2587*	0	-	-	-	-	-
2917592	-	0.0001	6	0	*XCV2588*	30	-	-	-	-	-
2919213	-	0.0000	11	1	-	-	*XCV2589*	117/1553	*XCV2590*	36/1154	-
2921819	-	0.0000	349	6	*XCV2592*	157	-	-	-	-	-
2924141	+	0.0383	3	1	*XCV2595*	16	-	-	-	-	-
2927298	+	0.0210	3	0	*XCV2597*	4	-	-	*XCV2596*	94/969	-
2929160	+	0.0000	24	4	*XCV2599*	24	-	-	-	-	-
2931916	-	0.0004	5	0	*XCV2601*	29	*XCV2602*	1848/26	-	-	-
2933879	-	0.0041	4	0	*XCV2602*	115	-	-	-	-	-
2935603	-	0.0000	17	4	*XCV2603*	0	-	-	-	-	-
2937657	-	0.0056	4	1	*XCV2605*	0	-	-	*XCV2606*	25/1089	-
2941785	-	0.0000	30	0	*XCV2608*	20	-	-	-	-	-
2944333	+	0.0008	5	0	*XCV2611*	33	-	-	*XCV2610*	86/2068	-
2945265	+	0.0005	5	0	-	-	*XCV2611*	899/189	-	-	-
2947490	+	0.0206	3	0	-	-	-	-	*XCV2612*	790/1825	-
2952716	+	0.0000	22	2	-	-	*XCV2618*	817/13	-	-	-
2953172	-	0.0002	6	0	-	-	-	-	*XCV2619*	75/347	-
2953268	+	0.0000	16	2	*XCV2620*	279	*XCV2619*	21/251	-	-	-
2958333	+	0.0424	4	0	-	-	-	-	*XCV2625*	769/886	-
2959110	+	0.0295	3	0	*XCV2626*	290	-	-	*XCV2625*	8/1663	-
2966234	-	0.0001	8	1	*XCV2630*	0	-	-	-	-	-
2967021	-	0.0000	29	3	*XCV2631*	73	-	-	-	-	-
2970083	-	0.0000	34	8	*XCV2634*	71	-	-	-	-	-
2971502	-	0.0000	31	4	*XCV2635*	0	-	-	-	-	-
2972659	-	0.0031	4	0	-	-	*XCV2636*	105/962	-	-	-
2976928	+	0.0008	7	0	*XCV2642*	28	-	-	-	-	-
3000010	+	0.0000	45	7	*XCV2661*	23	-	-	-	-	-
3005175	-	0.0036	5	0	-	-	*XCV2665*	479/363	-	-	-
3011678	+	0.0040	3	0	*XCV2671*	212	*XCV2670*	1236/65	-	-	-
3024175	-	0.0047	6	0	-	-	*XCV2674*	97/5035	-	-	-
3024425	+	0.0317	3	0	*XCV2675*	0	-	-	-	-	-

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3027493	+	0.0024	5	1	-	-	*XCV2677*	1074/2093	-	-	-
3038824	-	0.0029	3	0	*XCV2683*	25	-	-	-	-	-
3045902	-	0.0048	5	1	*XCV2688*	242	*XCV2689*	769/88	-	-	-
3046246	+	0.0000	162	23	-	-	-	-	*XCV2689*	425/432	-
3046996	-	0.0002	19	10	*XCV2690*	29	-	-	-	-	-
3047619	-	0.0002	16	6	-	-	-	-	-	-	+
3062769	+	0.0020	3	0	*XCV2703*	21	-	-	-	-	-
3065332	-	0.0000	14	0	*XCV2704*	0	*XCV2705*	110/0	-	-	-
3068986	-	0.0043	6	2	*XCV2709*	24	*XCV2710*	596/24	-	-	-
3069778	+	0.0000	10	1	*XCV2711*	43	-	-	-	-	-
3075487	+	0.0184	4	0	-	-	*XCV2715*	2113/2521	-	-	-
3078655	+	0.0001	7	0	*XCV2716*	22	-	-	-	-	-
3087900	+	0.0000	24	5	-	-	*XCV2723*	817/13	-	-	-
3093405	+	0.0044	4	1	-	-	-	-	*XCV2725*	892/1999	-
3094186	-	0.0004	6	0	-	-	*XCV2725*	111/2780	-	-	-
3094539	-	0.0000	8	0	*XCV2725*	242	-	-	-	-	-
3095807	-	0.0025	3	0	-	-	*XCV2726*	769/1048	-	-	-
3103362	-	0.0033	3	0	-	-	*XCV2729*	22/4333	-	-	-
3106814	-	0.0000	16	1	*XCV2730*	214	*XCV2731*	164/84	-	-	-
3108818	-	0.0114	3	0	-	-	*XCV2732*	620/1734	-	-	-
3112840	+	0.0171	4	1	-	-	-	-	*XCV2736*	959/672	-
3113638	+	0.0206	3	0	-	-	-	-	*XCV2736*	161/1470	-
3129258	-	0.0000	71	9	*XCV2748*	0	-	-	-	-	-
3130321	+	0.0015	5	0	-	-	*XCV2750*	16/1636	-	-	-
3142239	+	0.0017	3	0	*XCV2763*	4	-	-	-	-	-
3143314	+	0.0000	47	7	*XCV2764*	19	-	-	-	-	-
3151089	-	0.0019	4	0	-	-	*XCV2770*	46/1018	-	-	-
3151886	+	0.0278	4	1	-	-	-	-	*XCV2771* *XCV2772*	11/616 838/8	-
3151905	-	0.0000	17	2	*XCV2771*	30	*XCV2772*	819/11	-	-	-
3166096	-	0.0024	3	0	-	-	*XCV2786*	1363/58	-	-	-
3168287	-	0.0000	20	1	*XCV2787*	133	-	-	-	-	-
3174731	-	0.0001	7	1	*XCV2794*	263	*XCV2795*	1753/148	-	-	-
3184488	-	0.0001	10	2	-	-	-	-	*XCV2800*	857/1221	-
3193300	+	0.0000	20	2	-	-	*XCV2806*	817/13	-	-	-
3196040	-	0.0001	12	1	*XCV2809*	257	-	-	-	-	-
3198093	-	0.0001	8	0	*XCV2811*	25	-	-	-	-	-
3201040	-	0.0005	7	1	*XCV2812*	90	-	-	*XCV2813*	21/518	-
3201949	+	0.0156	4	1	-	-	-	-	*XCV2814*	203/201	-
3202518	+	0.0117	3	0	-	-	-	-	*XCV2815*	3413/330	-
3205497	-	0.0050	3	0	-	-	*XCV2815*	434/3309	-	-	-
3206053	+	0.0226	4	1	-	-	-	-	*XCV2816*	838/8	-
3206074	-	0.0000	15	2	*XCV2815*	143	*XCV2816*	817/13	-	-	-
3207206	-	0.0292	6	2	*XCV2817*	16	-	-	-	-	-
3209078	+	0.0000	12	0	-	-	-	-	*XCV2820*	266/210	-
3209434	-	0.0000	28	2	*XCV2820*	90	*XCV2821*	425/90	-	-	-
3209880	-	0.0000	14	0	*XCV2821*	21	-	-	-	-	-
3211387	-	0.0000	69	15	*XCV2822*	18	-	-	-	-	-
3214823	-	0.0020	3	0	*XCV2823*	123	-	-	-	-	-
3217042	-	0.0146	3	1	*XCV2826*	57	-	-	*XCV2827*	64/639	-
3219491	-	0.0000	15	1	*XCV2829*	21	-	-	*XCV2830*	38/304	-
3219506	+	0.0001	7	0	*XCV2831* *XCV2830*	289 23	-	-	*XCV2829*	36/536	-
3223002	-	0.0142	3	0	-	-	*XCV2833*	1321/790	-	-	-

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3223483	-	0.0042	4	0	-	-	*XCV2833*	840/1271	-	-	-
3227994	-	0.0041	6	1	-	-	*XCV2837*	1172/1539	-	-	-
3229766	-	0.0087	3	0	-	-	*XCV2838*	1007/501	-	-	-
3231114	-	0.0002	6	1	-	-	*XCV2839*	254/333	-	-	-
3233114	-	0.0008	3	0	-	-	*XCV2840*	192/1268	-	-	-
3239149	-	0.0102	4	1	-	-	*XCV2846*	433/655	-	-	-
3247561	-	0.0000	10	1	*XCV2854*	185	*XCV2855*	604/148	-	-	-
3248192	-	0.0005	9	0	*XCV2855*	27	-	-	*XCV2856*	86/883	-
3258473	+	0.0169	3	1	-	-	-	-	*XCV2864*	21/905	-
3259835	-	0.0036	5	1	*XCV2865*	289	*XCV2866*	769/88	-	-	-
3260179	+	0.0000	162	23	-	-	-	-	*XCV2866*	425/432	-
3260929	-	0.0004	19	10	*XCV2867*	29	*XCV2868*	266/75	-	-	-
3262486	-	0.0007	10	3	*XCV2869*	31	-	-	*XCV2870*	74/997	-
3267661	-	0.0000	16	3	-	-	*XCV2874*	105/1976	-	-	-
3270081	-	0.0406	4	2	-	-	*XCV2876*	462/647	-	-	-
3272560	-	0.0050	4	1	*XCV2878*	23	-	-	*XCV2879*	58/705	-
3272598	+	0.0103	4	1	*XCV2879*	20	-	-	*XCV2878*	61/984	-
3275968	-	0.0158	6	3	*XCV2881*	21	-	-	-	-	-
3276220	+	0.0041	5	1	*XCV2882*	20	-	-	-	-	-
3278748	+	0.0019	5	1	*XCV2884*	23	-	-	-	-	-
3284009	-	0.0058	3	0	*XCV2887*	42	-	-	-	-	-
3285246	+	0.0000	12	1	*XCV2890*	23	-	-	-	-	-
3285826	+	0.0001	8	1	*XCV2891*	21	-	-	-	-	-
3290997	-	0.0001	12	2	-	-	-	-	-	-	+
3291196	+	0.0042	4	1	*XCV2895*	107	-	-	-	-	-
3292629	+	0.0216	3	0	-	-	*XCV2896*	652/1678	-	-	-
3296402	+	0.0003	5	0	*XCV2898*	28	-	-	-	-	-
3298935	+	0.0001	7	0	-	-	*XCV2899*	236/2115	-	-	-
3301211	+	0.0002	8	1	*XCV2900*	27	-	-	-	-	-
3304175	-	0.0012	14	0	*XCV2901*	18	-	-	-	-	-
3304605	-	0.0124	3	0	*XCV2902*	0	-	-	-	-	-
3309674	+	0.0010	4	0	*XCV2907*	27	-	-	*XCV2906*	83/559	-
3309679	-	0.0000	34	2	*XCV2906*	88	-	-	*XCV2907*	22/561	-
3310327	+	0.0000	35	2	*XCV2908*	26	-	-	-	-	-
3311814	-	0.0012	7	2	*XCV2909*	23	-	-	-	-	-
3316609	+	0.0010	4	0	-	-	*XCV2914*	211/1138	-	-	-
3317782	+	0.0000	48	8	*XCV2916* *XCV2915*	262 0	-	-	-	-	-
3320950	-	0.0001	12	3	*XCV2919*	23	-	-	-	-	-
3323956	-	0.0145	3	1	-	-	*XCV2923*	1168/274	-	-	-
3325124	-	0.0022	8	3	*XCV2923*	0	-	-	*XCV2924*	51/848	-
3332244	+	0.0000	19	1	*XCV2929*	17	-	-	-	-	-
3334516	-	0.0000	17	1	*XCV2931*	0	-	-	-	-	-
3336764	-	0.0000	16	0	*XCV2933*	20	-	-	-	-	-
3339362	-	0.0000	14	0	*XCV2936*	0	-	-	-	-	-
3341585	-	0.0005	9	2	-	-	*XCV2938*	1132/1663	-	-	-
3343425	+	0.0027	7	0	*XCV2940*	28	-	-	-	-	-
3348398	+	0.0001	12	3	*XCV2944*	173	-	-	-	-	-
3349667	-	0.0231	3	0	-	-	-	-	*XCV2944*	1096/1102	-
3355947	+	0.0211	3	0	-	-	*XCV2950*	704/711	-	-	-
3358746	+	0.0002	11	3	*XCV2955*	22	*XCV2954*	148/1	-	-	-
3373502	-	0.0004	6	0	*XCV2966*	25	-	-	-	-	-
3377499	+	0.0000	8	0	*XCV2970*	0	-	-	-	-	-
3379701	-	0.0001	7	1	-	-	*XCV2971*	37/1087	-	-	-

[a], TSS position on the *Xcv* chromosome and the plasmid (pXCV183; marked with #), respectively. [b], p-value indicates the significance of the annotated TSS (see METHODS). [c], number of read starts at TSS position. [d], TSS classification and the corresponding CDS. [e], distance of the TSS to annotated start and stop codon of the corresponding CDS. [f], a TSS is classified as orphan (+) if it is neither classified as primary, internal nor antisense TSS.

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3380658	-	0.0147	4	0	-	-	*XCV2972*	39/719	-	-	-
3381360	-	0.0035	3	0	-	-	*XCV2973*	1843/559	-	-	-
3385409	-	0.0000	12	1	-	-	*XCV2974*	46/619	*XCV2975*	46/619	-
3388971	-	0.0035	5	0	*XCV2981*	23	-	-	-	-	-
3390399	+	0.0035	3	0	*XCV2983*	0	-	-	-	-	-
3395819	-	0.0027	5	2	*XCV2987*	82	-	-	-	-	-
3402000	+	0.0000	13	3	-	-	*XCV2992*	179/66	-	-	-
3403164	-	0.0051	3	0	-	-	-	-	*XCV2993*	743/1092	-
3408906	-	0.0127	4	0	-	-	-	-	-	-	+
3410761	+	0.0000	15	3	*XCV3000*	6	-	-	-	-	-
3413795	-	0.0049	5	0	-	-	*XCV3002*	256/1246	-	-	-
3418545	+	0.0055	4	0	*XCV3005*	16	-	-	-	-	-
3424210	-	0.0016	5	0	-	-	*XCV3010*	63/599	-	-	-
3426246	+	0.0002	10	2	*XCV3013*	178	-	-	-	-	-
3429740	+	0.0009	4	0	*XCV3016*	0	-	-	-	-	-
3449971	-	0.0042	4	1	*XCV3029*	27	-	-	*XCV3030*	76/786	-
3450047	+	0.0067	4	1	*XCV3030*	0	-	-	-	-	-
3452981	+	0.0000	14	1	*XCV3033*	110	-	-	-	-	-
3455491	+	0.0025	6	0	*XCV3036*	21	-	-	-	-	-
3459115	-	0.0105	10	5	-	-	*XCV3037*	8/693	-	-	-
3473908	-	0.0000	57	0	*XCV3049*	55	-	-	-	-	-
3474110	+	0.0001	9	1	*XCV3050*	19	-	-	-	-	-
3477013	-	0.0179	3	1	-	-	*XCV3053*	848/555	-	-	-
3478034	-	0.0001	6	0	*XCV3053*	173	*XCV3054*	1163/189	-	-	-
3482294	-	0.0016	4	0	*XCV3056*	49	-	-	-	-	-
3485108	-	0.0003	5	0	-	-	*XCV3059*	65/621	-	-	-
3485693	-	0.0001	11	0	*XCV3060*	23	-	-	-	-	-
3487971	-	0.0010	7	0	*XCV3063*	0	-	-	-	-	-
3488858	+	0.0200	8	0	-	-	*XCV3065*	12/893	-	-	-
3491956	-	0.0038	3	0	-	-	*XCV3067*	280/847	-	-	-
3493428	-	0.0000	11	1	*XCV3068*	42	-	-	-	-	-
3496031	+	0.0002	13	8	-	-	*XCV3071*	421/346	-	-	-
3496288	+	0.0000	13	3	*XCV3072*	199	*XCV3071*	678/89	-	-	-
3497562	+	0.0024	3	0	*XCV3074*	22	-	-	-	-	-
3498161	+	0.0052	7	2	*XCV3075*	21	-	-	-	-	-
3505699	+	0.0000	18	4	*XCV3083*	0	-	-	-	-	-
3518387	-	0.0000	994	98	*XCV3096*	0	-	-	-	-	-
3525219	-	0.0000	10	0	*XCV3103*	14	-	-	-	-	-
3525280	+	0.0031	3	0	*XCV3104*	57	-	-	*XCV3103*	75/1184	-
3528942	+	0.0037	3	0	-	-	*XCV3108*	507/173	-	-	-
3531766	-	0.0000	12	1	*XCV3111*	281	*XCV3112*	8/246	*XCV3113*	32/1030	-
3533944	+	0.0020	4	1	*XCV3116*	2	*XCV3115*	551/21	-	-	-
3534466	+	0.0045	3	1	*XCV3117*	40	*XCV3116*	520/37	-	-	-
3536664	+	0.0000	95	12	*XCV3119*	129	*XCV3118*	1356/38	-	-	-
3539930	+	0.0284	24	15	*XCV3123*	0	-	-	-	-	-
3539954	+	0.0062	11	0	-	-	*XCV3123*	24/365	-	-	-
3544261	+	0.0001	10	1	*XCV3127*	23	-	-	-	-	-
3545188	-	0.0029	5	1	-	-	*XCV3128*	970/43	-	-	-
3551148	-	0.0015	4	0	*XCV3131*	23	-	-	-	-	-
3557788	-	0.0203	4	0	-	-	*XCV3138*	1006/385	-	-	-
3573400	-	0.0028	8	3	*XCV3149*	21	-	-	*XCV3150*	79/1449	-
3574632	-	0.0019	4	0	-	-	-	-	*XCV3150*	1153/217	-
3575831	-	0.0011	3	0	-	-	*XCV3152*	752/411	-	-	-
3581398	-	0.0058	4	1	*XCV3159*	23	-	-	-	-	-

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3583485	+	0.0094	5	1	*XCV3163* *XCV3162*	269 0	-	-	-	-	-
3590242	-	0.0437	7	0	*XCV3165*	21	-	-	-	-	-
3601774	-	0.0055	4	1	*XCV3168*	22	-	-	*XCV3169*	75/734	-
3601849	+	0.0033	8	3	*XCV3169*	0	-	-	*XCV3168*	97/3669	-
3603357	+	0.0017	3	0	-	-	*XCV3171*	276/290	-	-	-
3610521	-	0.0000	53	4	*XCV3177*	188	-	-	-	-	-
3616498	-	0.0000	26	5	*XCV3182*	24	*XCV3183*	982/61	-	-	-
3620330	+	0.0000	31	3	*XCV3187*	89	-	-	-	-	-
3620973	+	0.0033	9	13	-	-	*XCV3187*	554/2343	-	-	-
3622644	-	0.0072	3	0	-	-	-	-	*XCV3187*	2225/672	-
3622778	+	0.0000	6	3	-	-	*XCV3187*	2359/538	-	-	-
3624042	-	0.0000	14	2	-	-	*XCV3188*	42/605	-	-	-
3628252	-	0.0020	4	0	*XCV3191*	23	-	-	-	-	-
3629839	-	0.0000	9	0	*XCV3192*	69	-	-	-	-	-
3630079	+	0.0000	41	5	*XCV3193*	25	-	-	-	-	-
3630391	+	0.0204	4	0	-	-	*XCV3193*	287/1089	-	-	-
3634081	-	0.0009	6	1	*XCV3195*	36	-	-	-	-	-
3634438	-	0.0010	7	0	-	-	*XCV3196*	865/241	-	-	-
3635324	-	0.0001	10	0	*XCV3196*	21	-	-	-	-	-
3639271	+	0.0000	16	2	*XCV3202*	0	-	-	*XCV3201*	33/587	-
3639290	-	0.0003	10	2	*XCV3201*	52	-	-	*XCV3202*	19/1396	-
3643121	+	0.0000	43	3	-	-	-	-	*XCV3205*	79/246	-
3672452	-	0.0000	9	0	-	-	*XCV3222*	757/304	-	-	-
3673257	-	0.0074	4	1	*XCV3222*	48	-	-	-	-	-
3680238	-	0.0221	4	1	-	-	*XCV3228*	238/967	-	-	-
3682598	-	0.0019	6	1	-	-	*XCV3229*	5082/2132	-	-	-
3683097	-	0.0018	3	0	-	-	*XCV3229*	4583/2631	-	-	-
3684784	-	0.0103	3	1	-	-	*XCV3229*	2896/4318	-	-	-
3691234	-	0.0115	16	7	*XCV3233*	53	-	-	-	-	-
3691397	+	0.0047	4	0	*XCV3234*	21	-	-	-	-	-
3698089	-	0.0219	3	1	-	-	*XCV3240*	342/179	-	-	-
3700913	-	0.0008	7	1	*XCV3241*	21	-	-	-	-	-
3710992	+	0.0001	11	0	*XCV3249*	14	-	-	-	-	-
3713718	+	0.0000	10	1	*XCV3251*	45	-	-	-	-	-
3721917	-	0.0320	3	1	*XCV3253*	44	-	-	*XCV3254*	59/604	-
3725397	+	0.0001	7	0	-	-	*XCV3257*	7/421	-	-	-
3727405	+	0.0000	21	1	-	-	-	-	-	-	+
3728571	+	0.0000	32	1	*XCV3260*	18	-	-	-	-	-
3732545	+	0.0081	3	0	*XCV3264*	21	-	-	*XCV3263*	81/704	-
3735352	+	0.0000	13	1	*XCV3268*	26	-	-	*XCV3267*	23/1255	-
3738534	-	0.0000	177	26	*XCV3271*	42	-	-	-	-	-
3739927	-	0.0263	4	1	*XCV3272*	58	-	-	-	-	-
3744037	-	0.0006	6	1	*XCV3277*	0	-	-	-	-	-
3746306	-	0.0008	5	0	-	-	*XCV3279*	796/1105	-	-	-
3748830	-	0.0020	3	0	*XCV3281*	265	*XCV3282*	594/131	-	-	-
3749453	-	0.0000	22	4	*XCV3282*	29	-	-	-	-	-
3750836	-	0.0003	6	0	*XCV3284*	22	-	-	*XCV3285*	23/435	-
3763733	-	0.0193	3	0	*XCV3293*	20	-	-	*XCV3294*	81/953	-
3765356	-	0.0062	4	0	*XCV3295*	19	-	-	-	-	-
3767403	+	0.0000	14	2	*XCV3297*	91	-	-	*XCV3296*	41/2002	-
3793853	-	0.0018	4	0	*XCV3315*	51	*XCV3316*	466/55	-	-	-
3804274	-	0.0017	3	0	-	-	*XCV3324*	604/1978	-	-	-
3819837	+	0.0000	21	0	*XCV3337*	152	-	-	-	-	-

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3827398	-	0.0129	3	1	-	-	*XCV3342*	613/379	-	-	-
3828101	+	0.0000	14	0	*XCV3343*	32	-	-	*XCV3342*	90/1082	-
3832104	-	0.0006	5	0	*XCV3345*	170	*XCV3346*	132/155	-	-	-
3834377	+	0.0206	3	0	-	-	-	-	*XCV3349*	459/707	-
3837008	+	0.0000	18	0	-	-	*XCV3351*	60/1391	-	-	-
3840372	-	0.0000	59	3	*XCV3352*	22	-	-	-	-	-
3840688	+	0.0000	27	0	-	-	-	-	*XCV3353*	224/201	-
3841040	-	0.0000	41	9	*XCV3353*	128	-	-	-	-	-
3841288	-	0.0375	6	0	-	-	-	-	*XCV3354*	34/1225	-
3841563	+	0.0014	3	0	-	-	*XCV3354*	309/950	-	-	-
3842377	+	0.0037	4	1	*XCV3355*	146	*XCV3354*	1123/136	-	-	-
3845146	-	0.0280	3	1	-	-	-	-	*XCV3357*	953/84	-
3850198	+	0.0000	23	2	-	-	*XCV3360*	817/13	-	-	-
3854811	-	0.0000	12	1	*XCV3366*	29	-	-	-	-	-
3859554	-	0.0002	6	0	*XCV3370*	25	-	-	-	-	-
3861697	-	0.0004	6	0	-	-	-	-	-	-	+
3862413	+	0.0057	7	3	*XCV3376*	0	-	-	-	-	-
3866613	-	0.0029	3	0	*XCV3380*	25	-	-	-	-	-
3868645	-	0.0063	3	0	-	-	*XCV3381*	1945/2014	-	-	-
3871397	-	0.0028	5	1	*XCV3382*	115	*XCV3383*	769/88	-	-	-
3871741	+	0.0000	162	23	-	-	-	-	*XCV3383*	425/432	-
3872491	-	0.0072	19	10	*XCV3384*	29	-	-	*XCV3385*	17/252	-
3872641	-	0.0000	20	0	*XCV3384*	179	-	-	*XCV3385*	167/102	-
3873924	+	0.0000	20	2	-	-	*XCV3387*	817/13	*XCV3388*	285/46	-
3877920	-	0.0000	26	2	*XCV3391*	247	-	-	-	-	-
3880139	-	0.0000	52	3	-	-	*XCV3392*	46/1567	*XCV3393*	35/703	-
3880635	-	0.0105	3	0	-	-	-	-	*XCV3393*	461/207	-
3884056	+	0.0001	20	9	*XCV3397*	29	*XCV3396*	1586/75	-	-	-
3884806	-	0.0000	170	21	-	-	-	-	*XCV3398*	425/432	-
3885150	+	0.0048	5	1	-	-	*XCV3398*	769/88	-	-	-
3886210	+	0.0000	17	6	*XCV3399*	173	-	-	-	-	-
3886493	-	0.0037	4	0	-	-	-	-	*XCV3399*	110/1965	-
3897296	-	0.0000	42	7	*XCV3408*	24	-	-	-	-	-
3897851	+	0.0000	162	23	-	-	-	-	*XCV3409*	425/432	-
3898601	-	0.0002	19	10	*XCV3410*	29	-	-	-	-	-
3899941	-	0.0104	5	0	-	-	*XCV3413*	1081/61	*XCV3412*	888/64	-
3903440	+	0.0000	13	1	*XCV3416* *XCV3417*	0 250	-	-	-	-	-
3908082	+	0.0002	7	0	*XCV3421*	27	-	-	-	-	-
3909587	+	0.0055	3	0	*XCV3424*	36	-	-	-	-	-
3910153	+	0.0074	4	1	*XCV3425*	25	-	-	-	-	-
3920060	-	0.0008	8	1	*XCV3430*	142	-	-	*XCV3431*	77/2038	-
3927580	+	0.0000	15	1	-	-	-	-	-	-	+
3931813	-	0.0000	14	1	*XCV3437*	22	-	-	-	-	-
3935639	+	0.0044	4	0	-	-	*XCV3440*	1960/1993	-	-	-
3939554	-	0.0018	5	1	-	-	-	-	*XCV3442*	1004/306	-
3944243	-	0.0036	4	0	*XCV3444*	21	-	-	-	-	-
3944604	-	0.0033	3	0	-	-	-	-	-	-	+
3956443	-	0.0040	8	3	-	-	*XCV3452*	111/434	-	-	-
3956726	+	0.0022	5	0	-	-	*XCV3453*	144/1214	-	-	-
3962678	+	0.0000	9	0	*XCV3460*	19	-	-	-	-	-
3963400	+	0.0000	26	4	*XCV3461*	0	-	-	-	-	-
3964399	-	0.0202	3	0	-	-	*XCV3462*	760/241	-	-	-
3965186	-	0.0002	5	0	*XCV3462*	27	-	-	-	-	-

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3969443	-	0.0020	3	0	*XCV3465*	258	-	-	-	-	-
3974418	-	0.0003	6	0	*XCV3468*	65	-	-	-	-	-
3975609	-	0.0000	36	5	*XCV3469*	45	-	-	-	-	-
3976811	+	0.0112	5	2	*XCV3471*	26	-	-	-	-	-
3977787	-	0.0001	9	1	-	-	-	-	*XCV3472*	209/402	-
3978409	+	0.0002	8	0	-	-	*XCV3473*	141/812	-	-	-
3980115	+	0.0007	5	0	*XCV3475*	23	-	-	-	-	-
3984582	-	0.0403	3	1	-	-	*XCV3481*	71/381	-	-	-
3991134	+	0.0046	3	0	*XCV3486*	0	-	-	-	-	-
3999749	-	0.0225	3	0	-	-	*XCV3491*	21/1304	-	-	-
4001676	+	0.0155	3	1	-	-	-	-	*XCV3492*	620/1125	-
4007577	-	0.0000	28	2	*XCV3496*	0	-	-	-	-	-
4008425	-	0.0006	6	3	-	-	*XCV3497*	1539/407	-	-	-
4012132	-	0.0017	6	0	*XCV3500*	174	*XCV3501*	884/171	-	-	-
4013200	+	0.0010	6	1	*XCV3502*	29	-	-	-	-	-
4018650	-	0.0000	242	26	*XCV3505* *XCV3506*	272 27	-	-	-	-	-
4018651	-	0.0025	76	7	*XCV3505* *XCV3506*	273 28	-	-	-	-	-
4019632	+	0.0011	8	2	-	-	-	-	*XCV3507*	1/934	-
4020256	-	0.0157	3	0	-	-	*XCV3508*	1653/497	-	-	-
4022331	-	0.0000	11	1	*XCV3509*	21	-	-	-	-	-
4024561	-	0.0001	9	1	*XCV3510*	0	-	-	-	-	-
4025035	-	0.0000	25	2	*XCV3511*	47	-	-	-	-	-
4026894	-	0.0018	7	2	*XCV3513*	22	-	-	*XCV3514*	88/810	-
4027759	-	0.0224	3	0	-	-	-	-	*XCV3514* *XCV3515*	777/55 32/334	-
4037253	+	0.0022	14	7	*XCV3525*	218	*XCV3524*	207/218	-	-	-
4037865	+	0.0000	2627	442	-	-	-	-	-	-	+
4037913	-	0.0000	36	17	-	-	-	-	-	-	+
4041002	+	0.0024	3	0	-	-	*XCV3530*	147/842	-	-	-
4042199	+	0.0120	3	0	-	-	*XCV3532*	28/691	*XCV3531*	5/204	-
4046356	+	0.0469	7	0	-	-	-	-	*XCV3534*	558/2621	-
4061390	-	0.0014	4	0	*XCV3544*	28	-	-	*XCV3545*	45/914	-
4064047	-	0.0329	5	0	-	-	*XCV3547*	69/656	-	-	-
4064199	+	0.0071	5	1	*XCV3548*	0	-	-	*XCV3547*	83/808	-
4064434	+	0.0046	4	0	-	-	*XCV3548*	235/1849	-	-	-
4068348	+	0.0000	18	2	-	-	-	-	*XCV3551*	110/483	-
4069816	-	0.0013	7	1	*XCV3552*	0	-	-	-	-	-
4069950	+	0.0000	35	10	-	-	-	-	-	-	+
4070819	-	0.0003	7	0	*XCV3553*	78	-	-	*XCV3554*	82/1335	-
4072489	+	0.0000	27	2	*XCV3556* *XCV3555*	240 94	-	-	-	-	-
4084692	-	0.0083	3	0	-	-	-	-	*XCV3566*	176/1173	-
4086583	-	0.0069	6	2	*XCV3567*	29	-	-	-	-	-
4089769	+	0.0000	44	3	*XCV3570*	32	-	-	-	-	-
4090439	+	0.0085	4	1	*XCV3571*	45	-	-	-	-	-
4098408	+	0.0006	5	0	-	-	-	-	*XCV3574*	31/2493	-
4100738	-	0.0000	25	1	*XCV3575*	184	-	-	-	-	-
4107864	-	0.0154	3	0	*XCV3578*	29	-	-	-	-	-
4108094	+	0.0000	30	8	-	-	-	-	-	-	+
4109000	+	0.0025	4	0	-	-	*XCV3579*	513/485	-	-	-
4112499	+	0.0105	3	0	*XCV3583*	186	*XCV3582*	929/186	-	-	-
4117962	-	0.0038	4	0	*XCV3586*	43	-	-	*XCV3587*	78/959	-

[a], TSS position on the *Xcv* chromosome and the plasmid (pXCV183; marked with #), respectively. [b], p-value indicates the significance of the annotated TSS (see METHODS). [c], number of read starts at TSS position. [d], TSS classification and the corresponding CDS. [e], distance of the TSS to annotated start and stop codon of the corresponding CDS. [f], a TSS is classified as orphan (+) if it is neither classified as primary, internal nor antisense TSS.

TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
4122387	+	0.0009	8	2	*XCV3589*	0	-	-	-	-	-
4123145	+	0.0016	5	0	*XCV3590*	24	-	-	-	-	-
4130785	-	0.0035	9	3	*XCV3596* *XCV3595*	28 236	-	-	-	-	-
4137131	-	0.0000	10	0	*XCV3598*	28	-	-	-	-	-
4160234	+	0.0144	3	0	-	-	*XCV3617*	377/2082	-	-	-
4165173	-	0.0193	3	0	*XCV3619*	34	-	-	-	-	-
4167914	+	0.0000	10	1	*XCV3622*	24	-	-	-	-	-
4171902	-	0.0026	5	1	-	-	*XCV3625*	15/773	*XCV3626*	61/984	-
4171936	+	0.0001	12	3	*XCV3626*	27	-	-	*XCV3625*	19/807	-
4176511	+	0.0483	3	0	-	-	*XCV3630*	293/984	-	-	-
4183458	-	0.0153	5	0	*XCV3636*	21	-	-	-	-	-
4199423	-	0.0272	6	0	*XCV3647*	2	-	-	-	-	-
4205166	-	0.0363	4	0	*XCV3651*	104	-	-	-	-	-
4213401	-	0.0000	14	3	-	-	*XCV3658*	2181/95	-	-	-
4214082	-	0.0152	3	1	-	-	*XCV3658*	1500/776	-	-	-
4223074	-	0.0022	3	0	-	-	*XCV3668*	1292/432	-	-	-
4224385	-	0.0043	3	0	*XCV3668*	19	-	-	-	-	-
4245230	-	0.0001	8	1	*XCV3675*	24	-	-	-	-	-
4247726	-	0.0193	3	0	-	-	*XCV3678*	165/131	-	-	-
4258733	+	0.0037	4	0	*XCV3686*	283	-	-	*XCV3685*	43/2833	-
4259551	+	0.0000	45	4	-	-	*XCV3686*	535/1456	-	-	-
4264986	-	0.0000	16	5	*XCV3690*	0	-	-	-	-	-
4265843	+	0.0000	23	1	*XCV3692*	21	-	-	-	-	-
4267656	+	0.0000	13	1	*XCV3693*	46	-	-	-	-	-
4269632	+	0.0001	7	0	-	-	*XCV3695*	102/1124	-	-	-
4270597	+	0.0017	4	0	*XCV3696*	248	*XCV3695*	1067/159	-	-	-
4274499	+	0.0003	8	1	*XCV3700*	27	-	-	*XCV3699*	89/685	-
4277595	-	0.0000	23	6	*XCV3702*	26	-	-	-	-	-
4279066	+	0.0042	5	2	*XCV3704*	31	-	-	-	-	-
4282216	-	0.0002	7	0	*XCV3705*	260	-	-	-	-	-
4283564	-	0.0041	3	1	-	-	*XCV3707*	189/365	-	-	-
4283579	+	0.0018	5	0	-	-	-	-	*XCV3707*	174/380	-
4284080	-	0.0011	5	0	-	-	*XCV3708*	557/327	-	-	-
4284757	-	0.0000	13	2	*XCV3708*	120	*XCV3709*	991/61	-	-	-
4285797	-	0.0017	5	0	*XCV3709*	49	-	-	-	-	-
4287776	+	0.0000	20	2	-	-	-	-	-	-	+
4292574	-	0.0066	3	0	-	-	-	-	*XCV3716*	871/1378	-
4293883	+	0.0001	7	0	-	-	*XCV3716*	2180/69	-	-	-
4296181	-	0.0047	6	2	*XCV3718*	82	-	-	-	-	-
4309263	-	0.0000	12	1	*XCV3726*	32	-	-	-	-	-
4309871	-	0.0055	9	3	*XCV3727*	186	-	-	-	-	-
4311306	+	0.0001	9	2	*XCV3730*	100	-	-	*XCV3729*	1/379	-
4311336	-	0.0000	8	0	*XCV3729*	29	-	-	*XCV3730*	70/1200	-
4314643	-	0.0000	12	0	*XCV3732*	23	-	-	-	-	-
4314757	+	0.0008	7	2	*XCV3733*	241	-	-	-	-	-
4316512	-	0.0299	3	0	-	-	-	-	*XCV3734*	10/360	-
4317032	+	0.0000	12	2	-	-	*XCV3735*	82/367	-	-	-
4318226	-	0.0018	5	1	*XCV3736*	37	-	-	-	-	-
4318420	+	0.0010	7	1	*XCV3737*	0	-	-	-	-	-
4321777	+	0.0001	8	1	*XCV3741*	33	-	-	-	-	-
4323846	-	0.0166	3	1	-	-	*XCV3743*	672/32	-	-	-
4326863	-	0.0448	3	1	*XCV3744*	182	-	-	-	-	-
4328091	+	0.0001	13	3	-	-	*XCV3746*	16/439	-	-	-

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4339048	+	0.0200	4	0	-	-	-	-	*XCV3754*	365/1461	-
4339435	-	0.0006	9	3	*XCV3754*	22	-	-	-	-	-
4349332	-	0.0151	3	0	*XCV3762*	23	-	-	*XCV3763*	92/502	-
4350995	-	0.0003	6	0	*XCV3765*	72	-	-	-	-	-
4358104	-	0.0422	3	1	-	-	*XCV3773*	121/676	-	-	-
4358669	-	0.0000	13	2	*XCV3774*	86	-	-	-	-	-
4364685	-	0.0000	45	0	*XCV3779*	31	-	-	-	-	-
4366433	+	0.0296	3	0	*XCV3782*	40	-	-	-	-	-
4367233	-	0.0359	11	0	-	-	-	-	*XCV3782* *XCV3783*	760/77 89/694	-
4367263	+	0.0001	6	0	*XCV3783*	59	-	-	-	-	-
4367880	-	0.0082	8	1	-	-	-	-	*XCV3783*	558/47	-
4369125	-	0.0193	3	0	*XCV3784*	23	-	-	-	-	-
4369290	+	0.0000	12	2	-	-	-	-	-	-	+
4371772	-	0.0000	68	5	-	-	-	-	-	-	+
4376389	-	0.0017	4	0	*XCV3789*	20	-	-	-	-	-
4377581	+	0.0009	11	3	*XCV3791*	25	-	-	*XCV3790*	83/976	-
4385950	+	0.0030	4	0	-	-	-	-	*XCV3800*	30/1145	-
4386005	-	0.0017	5	0	*XCV3800*	25	-	-	-	-	-
4386948	-	0.0021	4	0	-	-	-	-	*XCV3801*	10/270	-
4388305	-	0.0077	4	0	-	-	*XCV3802*	292/1042	-	-	-
4392400	+	0.0000	11	1	*XCV3807*	41	-	-	*XCV3806*	13/652	-
4393809	-	0.0194	4	2	-	-	*XCV3808*	538/556	-	-	-
4394950	-	0.0017	4	0	-	-	*XCV3809*	686/600	-	-	-
4395515	-	0.0030	4	0	-	-	*XCV3809*	121/1165	-	-	-
4398395	+	0.0001	8	0	*XCV3814*	26	-	-	-	-	-
4400663	+	0.0000	23	2	-	-	*XCV3816*	151/604	-	-	-
4402676	+	0.0018	9	3	-	-	*XCV3820*	49/301	-	-	-
4403069	+	0.0130	3	0	-	-	-	-	-	-	+
4407078	-	0.0020	3	0	*XCV3823*	68	-	-	-	-	-
4409801	-	0.0009	4	0	-	-	*XCV3825*	422/1011	-	-	-
4411740	-	0.0008	7	1	*XCV3826*	0	-	-	-	-	-
4413048	-	0.0400	4	0	*XCV3827*	252	-	-	*XCV3828*	85/978	-
4420847	+	0.0009	5	0	*XCV3836*	104	-	-	-	-	-
4423078	-	0.0000	12	0	-	-	*XCV3837*	245/1347	-	-	-
4423362	-	0.0192	6	1	*XCV3837*	39	-	-	-	-	-
4454565	+	0.0000	13	1	*XCV3871*	226	-	-	-	-	-
4480327	-	0.0021	6	0	*XCV3894*	262	*XCV3895*	199/232	-	-	-
4485330	-	0.0000	11	0	*XCV3903*	218	-	-	-	-	-
4488575	+	0.0019	3	0	-	-	-	-	-	-	+
4492811	-	0.0000	41	3	*XCV3912*	37	-	-	-	-	-
4492830	+	0.0125	3	0	-	-	-	-	*XCV3913* *XCV3912*	493/56 56/1930	-
4493424	+	0.0109	4	1	-	-	*XCV3914*	102/911	-	-	-
4498709	-	0.0005	7	0	*XCV3919*	22	-	-	-	-	-
4498825	+	0.0000	16	0	-	-	-	-	-	-	+
4499967	+	0.0085	3	0	*XCV3921*	43	-	-	*XCV3920*	39/1013	-
4500051	-	0.0006	6	1	*XCV3920*	45	-	-	*XCV3921*	41/780	-
4507411	-	0.0004	7	1	*XCV3926*	42	-	-	*XCV3927*	90/1223	-
4507470	+	0.0000	19	5	*XCV3927*	31	-	-	-	-	-
4509798	+	0.0000	54	10	*XCV3929*	99	*XCV3928*	1089/53	-	-	-
4515928	+	0.0000	10	1	-	-	*XCV3934*	156/773	-	-	-
4518620	-	0.0000	168	23	*XCV3936*	297	-	-	*XCV3937*	38/250	-
4521105	-	0.0000	18	0	*XCV3938*	37	-	-	-	-	-

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4522609	+	0.0016	6	0	*XCV3940*	114	-	-	*XCV3939*	80/1453	-
4526218	+	0.0424	4	0	*XCV3943*	0	-	-	-	-	-
4533862	-	0.0000	86	11	-	-	*XCV3949*	9/872	-	-	-
4537266	-	0.0001	8	0	*XCV3953*	0	-	-	-	-	-
4539141	+	0.0000	16	2	*XCV3955*	121	-	-	*XCV3954*	78/1796	-
4539754	-	0.0167	4	0	-	-	-	-	-	-	+
4542837	-	0.0000	25	4	*XCV3957*	22	-	-	-	-	-
4548120	-	0.0002	8	0	-	-	*XCV3960*	101/2127	-	-	-
4550453	-	0.0002	7	1	*XCV3963*	0	-	-	-	-	-
4551938	-	0.0012	6	1	*XCV3964*	21	-	-	-	-	-
4562352	-	0.0000	10	0	-	-	*XCV3969*	75/596	-	-	-
4562806	+	0.0469	7	0	-	-	-	-	*XCV3970*	425/138	-
4563705	+	0.0177	3	1	-	-	-	-	*XCV3971*	422/327	-
4564127	-	0.0008	4	0	*XCV3971*	0	-	-	-	-	-
4566249	-	0.0006	6	0	*XCV3976*	71	-	-	-	-	-
4578759	-	0.0060	3	0	*XCV3988*	27	-	-	-	-	-
4580486	-	0.0047	3	0	*XCV3990*	23	-	-	-	-	-
4580654	+	0.0015	22	14	*XCV3991*	88	-	-	-	-	-
4583277	+	0.0041	6	2	*XCV3994*	0	-	-	-	-	-
4585144	+	0.0165	3	0	-	-	*XCV3995*	114/1034	-	-	-
4587148	+	0.0089	4	1	-	-	*XCV3996*	796/781	-	-	-
4589368	-	0.0000	8	0	-	-	*XCV3998*	862/298	-	-	-
4590816	-	0.0271	9	5	*XCV3999*	0	-	-	-	-	-
4596722	-	0.0000	22	4	-	-	*XCV4007*	147/500	-	-	-
4596940	+	0.0002	14	5	*XCV4008*	21	-	-	*XCV4007*	71/718	-
4606228	+	0.0261	5	0	-	-	-	-	-	-	+
4606630	-	0.0003	7	1	-	-	-	-	-	-	+
4608071	-	0.0000	11	2	*XCV4010*	33	-	-	-	-	-
4608171	+	0.0000	21	4	*XCV4011*	38	-	-	-	-	-
4615446	+	0.0000	12	0	*XCV4018*	30	-	-	-	-	-
4626132	+	0.0272	3	1	*XCV4029*	1	-	-	-	-	-
4627723	+	0.0051	9	4	*XCV4030*	299	*XCV4029*	1590/116	-	-	-
4628082	+	0.0415	5	2	-	-	*XCV4030*	60/821	-	-	-
4634680	+	0.0206	3	0	-	-	-	-	*XCV4035*	178/1606	-
4636053	+	0.0000	17	3	-	-	-	-	*XCV4036*	1018/1186	-
4641920	-	0.0001	8	0	*XCV4040*	31	-	-	-	-	-
4646308	-	0.0070	4	1	*XCV4043*	27	-	-	-	-	-
4647214	+	0.0010	6	0	*XCV4046*	73	-	-	-	-	-
4649419	+	0.0057	3	0	-	-	*XCV4048*	26/528	-	-	-
4652571	-	0.0001	4	0	-	-	*XCV4052*	907/211	-	-	-
4654564	-	0.0343	9	6	-	-	*XCV4053*	18/1073	*XCV4054*	93/737	-
4654612	+	0.0110	3	0	*XCV4054*	45	-	-	*XCV4053*	30/1121	-
4664567	+	0.0141	3	0	*XCV4067*	173	-	-	-	-	-
4665917	+	0.0024	3	0	-	-	*XCV4068*	143/519	-	-	-
4670222	-	0.0002	6	0	*XCV4073*	78	-	-	-	-	-
4674977	+	0.0001	13	3	*XCV4079*	0	-	-	-	-	-
4676672	+	0.0078	3	0	-	-	*XCV4080*	916/451	-	-	-
4691793	-	0.0012	4	0	*XCV4094*	27	-	-	*XCV4095*	20/523	-
4694340	-	0.0000	28	4	*XCV4096*	32	-	-	-	-	-
4694851	+	0.0043	3	0	-	-	-	-	*XCV4097*	880/139	-
4697095	-	0.0028	3	0	*XCV4098*	24	-	-	-	-	-
4698077	-	0.0000	105	8	*XCV4100* *XCV4101*	268 41	-	-	-	-	-
4699089	-	0.0000	14	1	*XCV4102*	23	-	-	-	-	-

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4701994	-	0.0000	23	7	-	-	-	-	*XCV4106*	81/257	-
4706354	+	0.0070	4	1	-	-	*XCV4111*	10/301	-	-	-
4711085	+	0.0206	3	0	-	-	-	-	*XCV4115*	902/510	-
4714461	-	0.0015	4	0	*XCV4118*	44	-	-	-	-	-
4715131	-	0.0000	43	10	*XCV4119*	29	-	-	*XCV4120*	31/573	-
4720514	-	0.0088	4	0	*XCV4123*	1	-	-	-	-	-
4727508	-	0.0162	4	1	-	-	-	-	-	-	+
4728553	-	0.0000	15	1	*XCV4131*	20	-	-	-	-	-
4729028	-	0.0051	6	2	*XCV4132*	22	-	-	-	-	-
4731606	-	0.0104	3	0	-	-	*XCV4134*	17/1809	-	-	-
4735763	-	0.0011	7	2	*XCV4137*	177	-	-	-	-	-
4735903	+	0.0000	23	2	*XCV4138*	67	-	-	-	-	-
4736549	+	0.0008	6	0	-	-	*XCV4138*	579/2432	-	-	-
4737286	+	0.0422	3	0	-	-	*XCV4138*	1316/1695	-	-	-
4738388	+	0.0401	5	4	-	-	*XCV4138*	2418/593	-	-	-
4738712	+	0.0402	4	0	-	-	*XCV4138*	2742/269	-	-	-
4740424	+	0.0070	3	0	-	-	*XCV4140*	560/450	-	-	-
4748322	-	0.0132	5	1	*XCV4147*	160	-	-	-	-	-
4748727	-	0.0177	3	0	-	-	-	-	*XCV4148*	153/317	-
4751394	-	0.0007	4	0	-	-	*XCV4151*	23/801	*XCV4152*	60/1052	-
4751412	+	0.0006	7	1	*XCV4152*	42	-	-	*XCV4151*	5/819	-
4757260	+	0.0000	21	2	-	-	-	-	-	-	+
4757357	-	0.0000	12	3	-	-	-	-	-	-	+
4761503	-	0.0156	4	1	-	-	-	-	-	-	+
4768772	+	0.0000	14	1	*XCV4166*	17	-	-	-	-	-
4775972	-	0.0100	3	0	-	-	*XCV4167*	36/4274	-	-	-
4776441	-	0.0000	37	12	-	-	-	-	-	-	+
4784392	-	0.0001	13	3	*XCV4170* *XCV4171*	287 34	-	-	-	-	-
4788659	-	0.0193	3	1	-	-	-	-	*XCV4175*	1294/325	-
4793007	-	0.0025	3	0	-	-	*XCV4181*	2017/346	-	-	-
4796313	+	0.0079	3	0	-	-	-	-	*XCV4184* *XCV4185*	69/713 829/142	-
4798298	-	0.0023	7	2	*XCV4187*	111	*XCV4188*	689/54	-	-	-
4799322	-	0.0160	3	0	*XCV4189*	13	-	-	-	-	-
4804093	+	0.0039	3	0	*XCV4194*	26	-	-	-	-	-
4808258	-	0.0073	5	1	-	-	-	-	*XCV4197*	626/36	-
4808628	+	0.0000	17	1	*XCV4198*	0	-	-	-	-	-
4813172	-	0.0110	6	3	*XCV4200*	0	-	-	*XCV4201*	77/364	-
4857728	-	0.0087	3	0	*XCV4227*	23	-	-	-	-	-
4863179	+	0.0000	19	2	-	-	*XCV4235*	817/13	-	-	-
4882281	-	0.0001	7	0	-	-	*XCV4251*	86/1434	-	-	-
4887536	-	0.0000	15	2	*XCV4257*	162	-	-	-	-	-
4891644	+	0.0008	8	2	-	-	-	-	-	-	+
4895203	-	0.0000	14	2	*XCV4262*	0	-	-	-	-	-
4898418	-	0.0007	8	2	*XCV4264*	0	-	-	-	-	-
4902712	+	0.0151	3	0	*XCV4268*	41	-	-	*XCV4267*	53/679	-
4904300	-	0.0041	5	1	*XCV4270*	9	-	-	-	-	-
4906974	+	0.0031	4	0	-	-	-	-	*XCV4273*	40/274	-
4913268	+	0.0000	10	1	*XCV4279*	23	-	-	-	-	-
4914278	-	0.0017	6	1	-	-	-	-	-	-	+
4923729	-	0.0000	10	0	*XCV4289*	42	-	-	-	-	-
4946992	-	0.0000	9	0	*XCV4306*	0	-	-	-	-	-
4955269	-	0.0002	7	1	*XCV4311*	25	-	-	*XCV4312*	65/1876	-

[a], TSS position on the *Xcv* chromosome and the plasmid (pXCV183; marked with #), respectively. [b], p-value indicates the significance of the annotated TSS (see METHODS). [c], number of read starts at TSS position. [d], TSS classification and the corresponding CDS. [e], distance of the TSS to annotated start and stop codon of the corresponding CDS. [f], a TSS is classified as orphan (+) if it is neither classified as primary, internal nor antisense TSS.

TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
4966194	-	0.0004	8	2	-	-	*XCV4315*	42/1799	-	-	-
4968288	-	0.0126	3	0	-	-	-	-	*XCV4318*	845/84	-
4970190	-	0.0000	21	2	*XCV4320* *XCV4321*	270 27	-	-	-	-	-
4971181	-	0.0000	20	0	*XCV4322*	37	-	-	-	-	-
4971307	+	0.0006	6	1	-	-	*XCV4323*	9/953	-	-	-
4973545	-	0.0041	4	0	-	-	-	-	-	-	+
4980145	-	0.0129	5	0	*XCV4332*	86	-	-	*XCV4333*	50/2283	-
4994114	-	0.0156	3	0	*XCV4342*	22	-	-	-	-	-
4994366	+	0.0134	3	0	*XCV4343*	22	-	-	-	-	-
5006692	-	0.0001	6	0	*XCV4353*	22	-	-	-	-	-
5010792	+	0.0013	13	0	-	-	-	-	*XCV4356*	93/2675	-
5012026	+	0.0135	5	0	-	-	-	-	*XCV4357*	362/1053	-
5019614	+	0.0206	3	0	*XCV4363*	39	-	-	-	-	-
5024943	+	0.0000	9	0	-	-	*XCV4369*	15/200	-	-	-
5031007	+	0.0000	17	4	*XCV4373*	137	-	-	-	-	-
5032259	+	0.0000	24	1	*XCV4374*	105	-	-	-	-	-
5036212	-	0.0257	3	0	-	-	-	-	*XCV4375*	493/637	-
5042497	-	0.0288	3	1	-	-	*XCV4379*	311/978	-	-	-
5045604	-	0.0003	5	0	*XCV4382*	48	-	-	-	-	-
5047832	+	0.0013	11	4	*XCV4384*	0	-	-	-	-	-
5047838	-	0.0096	3	0	*XCV4383*	212	-	-	*XCV4384*	6/620	-
5051823	-	0.0000	15	0	-	-	*XCV4387*	28/1621	-	-	-
5060407	+	0.0261	5	0	-	-	-	-	-	-	+
5060810	-	0.0086	5	1	-	-	-	-	-	-	+
5068657	-	0.0001	8	0	*XCV4395*	63	-	-	-	-	-
5070952	-	0.0002	6	0	-	-	*XCV4399*	3606/446	-	-	-
5084851	-	0.0027	3	0	*XCV4408*	27	-	-	-	-	-
5086838	+	0.0032	3	0	-	-	*XCV4411*	726/1118	-	-	-
5087567	-	0.0028	3	0	-	-	-	-	*XCV4411*	1455/389	-
5088118	+	0.0132	4	0	*XCV4412*	38	-	-	-	-	-
5094547	-	0.0008	6	0	-	-	-	-	-	-	+
5102472	+	0.0003	4	0	-	-	*XCV4425*	136/127	-	-	-
5103051	+	0.0028	3	0	*XCV4426*	18	-	-	-	-	-
5105859	+	0.0000	10	1	-	-	-	-	*XCV4430*	391/94	-
5106753	-	0.0061	4	1	-	-	*XCV4431*	457/16	-	-	-
5108588	+	0.0068	4	0	*XCV4434*	28	-	-	*XCV4433*	4/625	-
5110351	-	0.0466	4	0	-	-	*XCV4435*	195/626	-	-	-
5110576	-	0.0061	5	0	*XCV4435*	30	-	-	-	-	-
5110677	+	0.0008	4	0	*XCV4436*	130	-	-	-	-	-
5116206	-	0.0185	11	0	*XCV4440*	222	*XCV4441*	2272/100	-	-	-
5126147	-	0.0050	4	1	-	-	*XCV4443*	137/3414	-	-	-
5131412	-	0.0017	7	0	*XCV4444*	107	-	-	-	-	-
5134201	-	0.0000	10	1	*XCV4449*	25	-	-	-	-	-
5134535	+	0.0000	17	5	*XCV4450*	24	-	-	-	-	-
5139920	-	0.0007	5	0	*XCV4457*	21	-	-	-	-	-
5142226	-	0.0414	10	0	*XCV4459*	138	-	-	-	-	-
5146436	+	0.0002	6	0	*XCV4466*	26	-	-	-	-	-
5153717	-	0.0193	3	0	*XCV4468*	112	-	-	-	-	-
5154683	-	0.0047	3	0	*XCV4469*	22	-	-	-	-	-
5156544	-	0.0002	8	0	-	-	*XCV4470*	25/1768	-	-	-
5164171	-	0.0166	3	1	*XCV4476*	0	-	-	-	-	-
5164230	+	0.0072	3	0	*XCV4477*	206	-	-	*XCV4476*	59/1222	-
5165820	+	0.0130	4	1	*XCV4478*	0	-	-	-	-	-

[a], TSS position on the *Xcv* chromosome and the plasmid (pXCV183; marked with #), respectively. [b], p-value indicates the significance of the annotated TSS (see METHODS). [c], number of read starts at TSS position. [d], TSS classification and the corresponding CDS. [e], distance of the TSS to annotated start and stop codon of the corresponding CDS. [f], a TSS is classified as orphan (+) if it is neither classified as primary, internal nor antisense TSS.

TSS position[a]	Strand	p-value[b]	Library 2[c]	Library 1[c]	Primary[d] to CDS	5' UTR (bp)	Internal[d] to CDS	Distance to start/stop[e] (bp)	Antisense[d] to CDS	Distance to start/stop[e] (bp)	Orphan[f]
5170524	+	0.0000	14	0	*XCV4482*	28	-	-	-	-	-
5178255	-	0.0000	293	20	*XCV4486* *XCV4487*	210 31	-	-	-	-	-
5178392	+	0.0000	23	2	-	-	-	-	-	-	+

Reference

1. Thieme, F., Koebnik, R., Bekel, T., Berger, C., Boch, J., Büttner, D., Caldana, C., Gaigalat, L., Goesmann, A., Kay, S. *et al.* (2005) Insights into genome plasticity and pathogenicity of the plant pathogenic bacterium *Xanthomonas campestris* pv. vesicatoria revealed by the complete genome sequence. *J. Bacteriol.*, **187**, 7254-7266.

[a], TSS position on the *Xcv* chromosome and the plasmid (pXCV183; marked with #), respectively. [b], p-value indicates the significance of the annotated TSS (see METHODS). [c], number of read starts at TSS position. [d], TSS classification and the corresponding CDS. [e], distance of the TSS to annotated start and stop codon of the corresponding CDS. [f], a TSS is classified as orphan (+) if it is neither classified as primary, internal nor antisense TSS.

Table S3. Putative chromosomal TSSs within the first 50 bp of annotated CDSs (1).

CDS	Strand	Annotated translation start	TSS position	Library 2[a]	Library 1[a]	Distance of annotated start codon and TSS (bp)
XCV0016	+	17004	17027	42	18	24
XCV0022	+	23353	23398	13	1	46
XCV0035	-	38772	38760	13	0	13
XCV0117	+	133981	133989	3	1	9
XCV0209	+	244583	244587	15	2	5
XCV0322	+	369633	369663	3	0	31
XCV0327	-	375518	375494	3	0	25
XCV0383	+	436658	436669	4	0	12
XCV0387	-	441649	441623	4	0	27
XCV0493	+	557939	557964	3	0	26
XCV0522	-	589469	589427	10	0	43
XCV0537	+	602285	602321	16	1	37
XCV0579	+	656595	656637	6	2	43
XCV0632	-	713619	713610	3	0	10
XCV0648	+	732783	732826	4	0	44
XCV0653	-	736984	736976	3	0	9
XCV0781	+	893350	893392	6	0	43
XCV0816	-	931162	931121	3	0	42
XCV0821	-	936169	936154	12	1	16
XCV1073	-	1206623	1206581	3	0	43
XCV1074	+	1206680	1206687	11	1	8
XCV1141	+	1270899	1270936	47	4	38
XCV1155	-	1284633	1284606	4	1	28
XCV1239	-	1391023	1390988	3	0	36
XCV1332	-	1498481	1498473	8	0	9
XCV1400	-	1581081	1581048	5	1	34
XCV1465	-	1648439	1648431	5	0	9
XCV1499	+	1690119	1690128	3	0	10
XCV1586	-	1793475	1793470	7	0	6
XCV1611	-	1825244	1825238	8	1	7
XCV1617	-	1830765	1830728	3	0	38
XCV1654	+	1864564	1864572	7	0	9
XCV1922	+	2173724	2173764	3	1	41
XCV2017	-	2299645	2299637	29	3	9
XCV2073	+	2363433	2363454	8	0	22
XCV2207	+	2536959	2536986	11	2	28
XCV2320	+	2651486	2651497	151	12	12
XCV2329	-	2660238	2660227	151	14	12
XCV2340	-	2672433	2672422	151	14	12
XCV2341	-	2673253	2672422	151	14	12
XCV2353	+	2682750	2682761	151	12	12
XCV2482	+	2801007	2801025	5	0	19
XCV2535	+	2859384	2859395	5	1	12
XCV2729	-	3103384	3103362	3	0	23
XCV2750	+	3130305	3130321	5	0	17
XCV2770	-	3151135	3151089	4	0	47
XCV2971	-	3379738	3379701	7	1	38
XCV2972	-	3380697	3380658	4	0	40
XCV2974	-	3385412	3385409	12	1	4
XCV3037	-	3459123	3459115	10	5	9
XCV3065	+	3488846	3488858	8	0	13
XCV3123	+	3539930	3539954	11	0	25
XCV3188	-	3624084	3624042	14	2	43
XCV3257	+	3725390	3725397	7	0	8
XCV3392	-	3880185	3880139	52	3	47
XCV3491	-	3999770	3999749	3	0	22
XCV3532	+	4042171	4042199	3	0	29
XCV3625	-	4171917	4171902	5	1	16

[a], number of read starts at TSS position.

CDS	Strand	Annotated translation start	TSS position	Library 2[a]	Library 1[a]	Distance of annotated start codon and TSS (bp)
XCV3746	+	4328075	4328091	13	3	17
XCV3949	-	4533871	4533862	86	11	10
XCV4048	+	4649393	4649419	3	0	27
XCV4053	-	4654582	4654564	9	6	19
XCV4111	+	4706344	4706354	4	1	11
XCV4134	-	4731623	4731606	3	0	18
XCV4151	-	4751417	4751394	4	0	24
XCV4167	-	4776008	4775972	3	0	37
XCV4315	-	4966236	4966194	8	2	43
XCV4323	+	4971298	4971307	6	1	10
XCV4369	+	5024928	5024943	9	0	16
XCV4387	-	5051851	5051823	15	0	29
XCV4470	-	5156569	5156544	8	0	26

Reference

1. Thieme, F., Koebnik, R., Bekel, T., Berger, C., Boch, J., Büttner, D., Caldana, C., Gaigalat, L., Goesmann, A., Kay, S. *et al.* (2005) Insights into genome plasticity and pathogenicity of the plant pathogenic bacterium *Xanthomonas campestris* pv. vesicatoria revealed by the complete genome sequence. *J. Bacteriol.*, **187**, 7254-7266.

[a], number of read starts at TSS position.

Table S4. Predicted antisense TSSs located close to the 3' end of annotated CDSs (+/- 100 bp) (1).

TSS position[a]	Strand	Library 2[b]	Library 1[b]	Distance of CDS end to TSS[c] (bp)	Gene product
81749#	-	9	2	43	XCVd0073: hypothetical protein
109851#	+	35	6	-99	XCVd0099: putative zeta toxin of the postsegregational killing system
127227#	-	4	2	-62	XCVd0115: Tn5044 transposase
159633#	+	3	0	-74	XCVd0154: hypothetical protein
180140#	+	3	0	-86	XCVd0171: hypothetical protein
11675	-	6	0	-72	XCV0008: energy transducer TonB protein
78522	+	23	2	-46	XCV0067: hypothetical protein
204493	+	12	2	-71	XCV0172: indolepyruvate ferredoxin oxidoreductase
261741	-	15	1	3	XCV0221: hypothetical protein
321787	-	7	0	-77	XCV0275: putative DNA-binding protein
485143	-	13	0	-94	XCV0435: HrcC protein
533893	+	6	0	-36	XCV0472: hypothetical protein
558968	-	8	1	-82	XCV0493: hypothetical protein
590048	-	10	0	-13	XCV0523: 50S ribosomal protein L13
707695	+	4	1	-8	XCV0625: IS1477 transposase
799920	-	6	2	-49	XCV0704: hypothetical protein
1041488	-	3	1	21	XCV0911: putative secreted protein
1095646	-	4	0	-86	XCV0964: hypothetical protein
1454260	-	3	1	-15	XCV1295: putative phage replication protein
1618915	+	4	0	-35	XCV1441: methionyl-tRNA synthetase
1659403	+	4	0	93	XCV1477: putative signal transduction protein
1750856	+	21	2	-46	XCV1552: hypothetical protein
1783909	+	5	0	-52	XCV1579: hypothetical protein
1875752	-	6	0	-78	XCV1666: hypothetical protein
1880820	-	3	0	-42	XCV1669: lysyl-tRNA synthetase
2078061	+	4	1	-8	XCV1840: IS1477 transposase
2081955	+	3	0	-76	XCV1846: ISxcC1 transposase
2191418	+	4	0	54	XCV1936: hypothetical protein
2192469	+	3	0	20	XCV1937: hypothetical protein
2484379	-	210	29	-75	XCV2161: conjugal transfer protein TrbL
2580164	+	3	0	-29	XCV2250: putative secreted protein
2595113	-	5	1	-68	XCV2261: phage-related integrase
2656549	+	8	4	-35	XCV2325: streptomycin 6-kinase
2768989	-	10	3	-67	XCV2436: IS1595 transposase
2799097	+	5	1	-68	XCV2479: putative replication protein C (fragment)
2813614	+	3	0	-90	XCV2492: glycosyltransferase
2885613	-	6	1	43	XCV2557: hypothetical protein
3151886	+	4	1	-8	XCV2772: IS1477 transposase
3206053	+	4	1	-8	XCV2816: IS1477 transposase
3845146	-	3	1	84	XCV3357: putative secreted protein
3873924	+	20	2	-46	XCV3388: hypothetical protein
3899941	-	5	0	-64	XCV3412: ISxac2 transposase
4027759	-	3	0	-55	XCV3514: ribonuclease PH
4367233	-	11	0	-77	XCV3782: OmpW family outer membrane protein
4367880	-	8	1	47	XCV3783: putative secreted protein
4492830	+	3	0	-56	XCV3913: D-tyrosyl-tRNA(Tyr) deacylase
4808258	-	5	1	-36	XCV4197: hypothetical protein
4968288	-	3	0	84	XCV4318: hypothetical protein
5105859	+	10	1	94	XCV4430: hypothetical protein

[a], TSS position on the *Xcv* chromosome and the plasmid (pXCV183; marked with #), respectively. [b], number of read starts at TSS position.
[c], positive and negative sign indicates TSS within and downstream the CDS, respectively.

Reference

1. Thieme, F., Koebnik, R., Bekel, T., Berger, C., Boch, J., Büttner, D., Caldana, C., Gaigalat, L., Goesmann, A., Kay, S. *et al.* (2005) Insights into genome plasticity and pathogenicity of the plant pathogenic bacterium *Xanthomonas campestris* pv. vesicatoria revealed by the complete genome sequence. *J. Bacteriol.*, **187**, 7254-7266.

Table S5. 5' UTRs of type III effector genes, leaderless genes with TSSs ≤10 bp upstream of the annotated start codon and genes containing long 5' UTRs (150 to 300 bp) referring to the annotated genome sequence of *Xcv* strain 85-10 (1). TSSs marked with # are located on pXCV183. TSSs of type III effector genes marked in bold exhibit a PIP box and -10 T/A-rich element as previously described (2). The PIP box of the type III effector gene *XCV2280* was identified in this study and is shown in brackets.

TSS position	Strand	Library 2[a]	Library 1[a]	5' UTR (bp)	Gene product
5' UTRs of Type III Effectors					
114827#	-	11	0	375	XCVd0104: avirulence protein AvrBs1
62304	+	3	0	23	XCV0052: avirulence protein AvrBs2
486511	+	5	0	678	XCV0437: xanthomonas outer protein D (XopD)
532770	+	8	1	0	XCV0471: avirulence protein AvrRxv
660302	+	12	2	341	XCV0581: xanthomonas outer protein B (XopB)
1184957	+	12	1	25	XCV1055: xanthomonas outer protein O (XopO)
2480236	-	183	10	22	XCV2156: xanthomonas outer protein J1 (XopJ1)
2613410 (2613343-2613403)	+	33	2	23	XCV2280: xanthomonas outer protein E2 (XopE2)
2767760	-	8	1	187	XCV2435: xanthomonas outer protein C (XopC)
3348398	+	12	3	173	XCV2944: xanthomonas outer protein N (XopN)
4371772	-	68	5	477	XCV3785: xanthomonas outer protein AA (XopAA)
Leaderless Transcripts					
193010	+	9	2	0	XCV0161: putative amidase/aminoacylase/peptidase family protein
201827	-	7	2	0	XCV0168: putative secreted protein
238550	-	7	0	0	XCV0201: uroporphyrinogen-III synthase
278015	-	6	0	0	XCV0236: predicted rRNA methylase
283462	+	4	0	0	XCV0243: acyl-CoA synthetase
288111	+	10	5	0	XCV0247: hypothetical protein
332993	+	9	1	0	XCV0287: predicted hydrolase of the alpha/beta superfamily
377721	+	4	0	3	XCV0330: putative NADH flavin oxidoreductase
411941	+	3	1	6	XCV0359: predicted Fe-S-cluster oxidoreductase
532770	+	8	1	0	XCV0471: avirulence protein AvrRxv
585332	+	8	5	0	XCV0518: phosphoserine phosphatase
599405	+	18	5	0	XCV0534: putative Iron-sulfur cluster assembly accessory protein
770365	+	4	0	0	XCV0679: porphobilinogen deaminase
779535	-	8	3	0	XCV0686: aspartate/tyrosine/aromatic aminotransferase
782120	+	7	0	0	XCV0688: hypothetical protein
823961	+	4	0	0	XCV0723: membrane-bound lytic transglycosylase
851592	+	8	0	0	XCV0747: 2-amino-4-hydroxy-6-hydroxymethyldihydropteridine pyrophosphokinase
884284	-	4	0	0	XCV0773: tRNA nucleotidyltransferase/poly(A) polymerase
959187	+	9	2	0	XCV0840: thiamine monophosphate synthase
997844	-	21	0	0	XCV0868: tRNA-dihydrouridine synthase
1028253	-	3	0	0	XCV0899: hypothetical protein
1029078	-	5	0	0	XCV0900: dimethyladenosine transferase (rRNA methylation)
1036560	+	6	0	0	XCV0907: 2-octaprenyl-6-methoxyphenyl hydroxylase
1102907	-	3	1	0	XCV0973: molybdenum cofactor biosynthesis protein B
1265655	-	3	1	0	XCV1134: MoxR-like ATPase
1419087	+	8	1	0	XCV1260: two-component system sensor protein
1450021	+	8	1	0	XCV1292: 4-hydroxy-3-methylbut-2-enyl diphosphate reductase
1504286	-	15	0	0	XCV1337: putative cytochrome C assembly protein
1601206	+	5	2	0	XCV1423: hypothetical protein
1631636	-	3	0	8	XCV1452: hypothetical protein
1631992	+	3	1	10	XCV1453: hypothetical protein
1669473	+	12	1	0	XCV1485: methionine aminopeptidase
1712207	-	4	0	0	XCV1516: ABC transporter permease and ATP-binding protein
1719682	+	20	2	0	XCV1525: NAD/FAD-binding protein
1756686	-	27	2	0	XCV1556: tmRNA-binding protein SmpB
1816736	+	17	0	1	XCV1607: RNase R

[a], number of read starts at the TSS position.

TSS position	Strand	Library 2[a]	Library 1[a]	5' UTR (bp)	Gene product
1843191	+	5	0	0	XCV1631: hypothetical protein
1859472	-	7	2	0	XCV1646: carbonic anhydrase
1988882	+	9	2	9	XCV1768: RNA-binding protein Hfq
1993650	+	4	1	0	XCV1772: LexA repressor
2046910	+	3	0	10	XCV1814: tRNA nucleotidyltransferase/poly(A) polymerase
2056210	+	3	0	3	XCV1823: Glucan 1,4-beta-glucosidase precursor
2066165	-	6	3	0	XCV1828: two-component system sensor protein
2066489	+	7	0	0	XCV1829: 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase
2133276	-	11	2	0	XCV1886: methylthioribulose-1-phosphate dehydratase
2316851	-	7	0	0	XCV2034: chemotaxis signal transduction protein
2349615	+	5	0	0	XCV2060: putative ATPase
2363433	+	8	0	0	XCV2073: molybdopterin biosynthesis protein
2411526	-	3	0	0	XCV2105: two-component system sensor kinase
2534689	+	11	4	0	XCV2204: hypothetical protein
2646914	+	3	0	1	XCV2314: ArsR family transcriptional regulator
2744537	-	3	0	9	XCV2419: FKBP-type peptidyl-prolyl cis-trans isomerase
2744576	+	7	4	0	XCV2420: putative membrane protein
2745041	+	4	0	0	XCV2421: predicted sulfurtransferase
2756332	+	14	3	0	XCV2429: thioredoxin-like protein
2843374	+	8	0	0	XCV2519: glutamine cyclotransferase
2853818	+	8	1	0	XCV2531: homoserine O-acetyltransferase
2915414	-	21	2	0	XCV2586: ABC transporter ATPase
2915525	+	5	1	0	XCV2587: ATP-dependent RNA helicase
2927298	+	3	0	4	XCV2597: glutamyl-tRNA synthetase
2935603	-	17	4	0	XCV2603: N-acetylmuramoyl-L-alanine amidase precursor
2937657	-	4	1	0	XCV2605: hypothetical protein
2966234	-	8	1	0	XCV2630: stringent starvation protein B
2971502	-	31	4	0	XCV2635: putative soluble lytic murein transglycosylase precursor
3024425	+	3	0	0	XCV2675: TetR family transcriptional regulator
3065332	-	14	0	0	XCV2704: cellulase precursor
3129258	-	71	9	0	XCV2748: proline racemase
3142239	+	3	0	4	XCV2763: HNH endonuclease family protein
3304605	-	3	0	0	XCV2902: putative 6-O-methylguanine-DNA methyltransferase
3317782	+	48	8	0	XCV2915: exodeoxyribonuclease VII small subunit
3325124	-	8	3	0	XCV2923: putative modulator of DNA gyrase
3334516	-	17	1	0	XCV2931: rRNA large subunit methyltransferase
3339362	-	14	0	0	XCV2936: rare lipoprotein B
3377499	+	8	0	0	XCV2970: hypothetical protein
3390399	+	3	0	0	XCV2983: 3-methyladenine DNA glycosylase
3410761	+	15	3	6	XCV3000: LysR family transcriptional regulator
3429740	+	4	0	0	XCV3016: hypothetical protein
3450047	+	4	1	0	XCV3030: deoxyribonuclease V
3487971	-	7	0	0	XCV3063: hypothetical protein
3505699	+	18	4	0	XCV3083: acetyltransferase (GNAT) family protein
3518387	-	994	98	0	XCV3096: ComEA-related DNA uptake protein
3533944	+	4	1	2	XCV3116: putative secreted protein
3539930	+	24	15	0	XCV3123: putative enzyme II of the phosphotransferase system
3583485	+	5	1	0	XCV3162: hypothetical protein
3601849	+	8	3	0	XCV3169: hypothetical protein
3639271	+	16	2	0	XCV3202: adenosylmethionine--8-amino-7-oxononanoate transaminase
3744037	-	6	1	0	XCV3277: Holliday junction DNA helicase
3862413	+	7	3	0	XCV3376: hypothetical protein
3903440	+	13	1	0	XCV3416: thiamin S sulphur transfer protein
3963400	+	26	4	0	XCV3461: hypothetical protein
3991134	+	3	0	0	XCV3486: putative secreted protein
4007577	-	28	2	0	XCV3496: MoxR-like ATPase
4024561	-	9	1	0	XCV3510: guanosine-3',5'-bis(diphosphate) 3'-pyrophosphohydrolase

[a], number of read starts at the TSS position.

TSS position	Strand	Library 2[a]	Library 1[a]	5' UTR (bp)	Gene product
4064199	+	5	1	0	XCV3548: putative membrane-associated phospholipid phosphatase
4069816	-	7	1	0	XCV3552: UDP-N-acetylmuramate--L-alanine ligase
4122387	+	8	2	0	XCV3589: TetR family transcriptional regulator
4199423	-	6	0	2	XCV3647: nicotinate phosphoribosyltransferase
4264986	-	16	5	0	XCV3690: CDP-diacylglycerol--serine O-phosphatidyltransferase
4318420	+	7	1	0	XCV3737: putative signal transduction protein
4411740	-	7	1	0	XCV3826: hypothetical protein
4526218	+	4	0	0	XCV3943: primosomal protein N
4537266	-	8	0	0	XCV3953: ABC transporter ATP-binding protein involved in cell division
4550453	-	7	1	0	XCV3963: hypothetical protein
4564127	-	4	0	0	XCV3971: HAD superfamily hydrolase
4583277	+	6	2	0	XCV3994: DNA primase
4590816	-	9	5	0	XCV3999: hypothetical protein
4626132	+	3	1	1	XCV4029: arginyl-tRNA synthetase
4674977	+	13	3	0	XCV4079: predicted hydrolase (HAD superfamily)
4720514	-	4	0	1	XCV4123: ATP-dependent DNA helicase
4808628	+	17	1	0	XCV4198: coproporphyrinogen III oxidase
4813172	-	6	3	0	XCV4200: DNA polymerase I
4895203	-	14	2	0	XCV4262: putative secreted protein
4898418	-	8	2	0	XCV4264: methyltransferase
4904300	-	5	1	9	XCV4270: exodeoxyribonuclease III
4946992	-	9	0	0	XCV4306: putative outer membrane protein
5047832	+	11	4	0	XCV4384: thymidine kinase
5164171	-	3	1	0	XCV4476: hypothetical protein
5165820	+	4	1	0	XCV4478: putative membrane protein
				long 5' UTRs	
101600#	+	5	0	287	XCVd0093: putative secreted protein
116378#	+	80	8	277	XCVd0107: ISxac2 transposase (fragment)
118654#	+	8	1	201	XCVd0110: hypothetical protein
123136#	+	5	0	218	XCVd0114: putative cointegrate resolution protein S
1404	+	15	1	202	XCV0002: DNA polymerase III subunit beta chain
78978	-	8	5	225	XCV0067: hypothetical protein
81973	-	6	2	270	XCV0069: putative secreted protein
117077	-	4	0	274	XCV0099: putative secreted protein
155750	+	11	2	227	XCV0131: hypothetical protein
253127	-	25	10	203	XCV0214: putative transposase
304274	+	5	0	150	XCV0264: malate synthase
320398	+	6	1	234	XCV0274: TetR family transcriptional regulator
448950	+	3	0	226	XCV0395: hypothetical protein
532651	-	5	0	151	XCV0470: ATP-dependent RNA helicase
647837	+	18	0	192	XCV0574: phospho-2-dehydro-3-deoxyheptonate aldolase
765474	+	3	0	282	XCV0675: glucans biosynthesis glucosyltransferase H
765583	+	3	0	173	XCV0675: glucans biosynthesis glucosyltransferase H
782575	+	13	2	244	XCV0689: diaminopimelate epimerase
829714	+	24	4	266	XCV0728: lipoate-protein ligase B
951830	+	10	2	181	XCV0835: cell division protein FtsZ
1042407	+	7	1	180	XCV0913: protocatechuate 4,5-dioxygenase beta chain
1116481	+	7	2	259	XCV0986: transcription antitermination factor
1137159	+	79	14	180	XCV1002: 50S ribosomal protein L2
1137964	+	9	2	209	XCV1003: 30S ribosomal protein S19
1149059	+	4	1	233	XCV1024: 50S ribosomal protein L17
1149619	+	3	0	180	XCV1025: hypothetical protein
1164003	-	5	0	163	XCV1036: hypothetical protein
1190312	+	8	2	228	XCV1061: Glutamine phosphoribosylpyrophosphate amidotransferase
1250212	+	5	1	153	XCV1120: hypothetical protein
1340207	+	6	1	233	XCV1198: hypothetical protein
1399557	-	4	2	291	XCV1243: glycine cleavage system P-protein

[a], number of read starts at the TSS position.

TSS position	Strand	Library 2[a]	Library 1[a]	5' UTR (bp)	Gene product
1424474	-	4	0	171	XCV1265: putative D-alanyl-D-alanine carboxypeptidase
1549864	+	6	1	189	XCV1370: RNA polymerase ECF-type sigma factor RpoE2
1555991	+	7	2	180	XCV1375: putative membrane protein
1580759	-	6	1	248	XCV1399: putative secreted protein
1591652	-	5	1	154	XCV1410: hypothetical protein
1653692	-	18	6	209	XCV1470: outer membrane antigen
1663194	-	15	4	242	XCV1479: 30S ribosomal protein S2
1676072	+	7	0	220	XCV1490: asparagine synthetase B
1797706	-	9	0	280	XCV1591: GntR family transcriptional regulator
1998924	+	18	1	249	XCV1776: carbon storage regulator
2011844	-	4	0	264	XCV1789: hypothetical protein
2081259	+	5	1	156	XCV1845: putative membrane protein
2109973	+	20	2	151	XCV1864: hypothetical protein
2111307	+	17	4	226	XCV1866: bifunctional aspartokinase/homoserine dehydrogenaseI
2136615	-	4	0	270	XCV1888: amino acid-polyamine-organocation superfamily protein
2236742	-	5	0	157	XCV1962: Flagellar motor component MotA
2339660	+	10	1	270	XCV2056: cell division protein FtsK
2350997	+	5	2	171	XCV2061: Putative membrane-associated chromosome condensation protein
2399163	+	17	2	185	XCV2103: putative filamentous hemagglutinin-like protein
2630585	+	5	1	207	XCV2297: ISxac2 transposase
2631738	+	5	1	211	XCV2298: phage-related integrase
2676073	+	17	4	205	XCV2345: putative cytosine-specific DNA methylase
2767760	-	8	1	187	XCV2435: xanthomonas outer protein C (XopC)
2803838	-	24	7	162	XCV2484: phage-related integrase
2811009	-	3	1	296	XCV2489: glutathione-regulated potassium efflux protein B
2833387	-	5	1	242	XCV2509: putative secreted protein
2880224	-	36	5	264	XCV2551: N-acetylornithine carbamoyltransferase
2894891	+	45	4	229	XCV2568: putative secreted protein
2894892	+	30	0	228	XCV2568: putative secreted protein
2921819	-	349	6	157	XCV2592: major cold shock protein
2953268	+	16	2	279	XCV2620: putative DNA-binding protein
2959110	+	3	0	290	XCV2626: 3-methyladenine DNA glycosylase
3011678	+	3	0	212	XCV2671: two-component system sensor histidine kinase-response regulator hybridprotein
3045902	-	5	1	242	XCV2688: hypothetical protein
3094539	-	8	0	242	XCV2725: TonB-dependent outer membrane receptor
3106814	-	16	1	214	XCV2730: TonB-dependent outer membrane receptor
3174731	-	7	1	263	XCV2794: translation initiation factor IF-3
3196040	-	12	1	257	XCV2809: putative secreted protein
3247561	-	10	1	185	XCV2854: preprotein translocase subunit SecG
3259835	-	5	1	289	XCV2865: tryptophan synthase subunit alpha
3348398	+	12	3	173	XCV2944: xanthomonas outer protein N (XopN)
3426246	+	10	2	178	XCV3013: putative cysteine protease precursor
3478034	-	6	0	173	XCV3053: UDP-N-acetylmuramoyl-L-alanyl-D-glutamate synthetase
3496288	+	13	3	199	XCV3072: membrane-bound metalloendopeptidase
3531766	-	12	1	281	XCV3111: hypothetical protein
3610521	-	53	4	188	XCV3177: homoserine O-acetyltransferase
3748830	-	3	0	265	XCV3281: Holliday junction resolvase
3819837	+	21	0	152	XCV3337: glucose dehydrogenase
3832104	-	5	0	170	XCV3345: NAD synthetase
3872641	-	20	0	179	XCV3384: ISxac3 transposase
3877920	-	26	2	247	XCV3391: hypothetical protein
3886210	+	17	6	173	XCV3399: hypothetical protein
3969443	-	3	0	258	XCV3465: phosphoglycerate kinase
4012132	-	6	0	174	XCV3500: Tfp pilus assembly protein PilN
4037253	+	14	7	218	XCV3525: hypothetical protein
4100738	-	25	1	184	XCV3575: thiamine biosynthesis protein ThiC

[a], number of read starts at the TSS position.

TSS position	Strand	Library 2[a]	Library 1[a]	5' UTR (bp)	Gene product
4112499	+	3	0	186	XCV3583: 2-isopropylmalate synthase
4258733	+	4	0	283	XCV3686: soluble lytic murein transglycosylase precursor
4270597	+	4	0	248	XCV3696: ABC transporter ATP-binding protein
4282216	-	7	0	260	XCV3705: UDP-glucose dehydrogenase
4309871	-	9	3	186	XCV3727: hypothetical protein
4314757	+	7	2	241	XCV3733: ATP-dependent RNA helicase
4326863	-	3	1	182	XCV3744: oligopeptidase A
4413048	-	4	0	252	XCV3827: hypothetical protein
4454565	+	13	1	226	XCV3871: hypothetical protein
4480327	-	6	0	262	XCV3894: methionine aminopeptidase
4485330	-	11	0	218	XCV3903: hypothetical protein
4518620	-	168	23	297	XCV3936: tropinone reductase
4627723	+	9	4	299	XCV4030: putative secreted protein
4664567	+	3	0	173	XCV4067: hypothetical protein
4735763	-	7	2	177	XCV4137: putative glutathione transferase
4748322	-	5	1	160	XCV4147: putative membrane protein
4887536	-	15	2	162	XCV4257: 50S ribosomal protein L28
5047838	-	3	0	212	XCV4383: ATP-dependent DNA helicase
5116206	-	11	0	222	XCV4440: hypothetical protein
5164230	+	3	0	206	XCV4477: tellurium resistance protein

References

1. Thieme, F., Koebnik, R., Bekel, T., Berger, C., Boch, J., Büttner, D., Caldana, C., Gaigalat, L., Goesmann, A., Kay, S. *et al.* (2005) Insights into genome plasticity and pathogenicity of the plant pathogenic bacterium *Xanthomonas campestris* pv. vesicatoria revealed by the complete genome sequence. *J. Bacteriol.*, **187**, 7254-7266.
2. Koebnik, R., Krüger, A., Thieme, F., Urban, A. and Bonas, U. (2006) Specific binding of the *Xanthomonas campestris* pv. vesicatoria AraC-type transcriptional activator HrpX to plant-inducible promoter boxes. *J. Bacteriol.*, **188**, 7652-7660.

[a], number of read starts at the TSS position.

Table S6. Candidate riboswitches and widely conserved RNAs in *Xcv*.

Riboswitch (Rfam entry)[a]	**Chromosomal position (strand)[b]**	**TSS position[c]**	**Downstream CDS[d]**
FMN (RF00050)	911608-911787 (+)	-	Riboflavin synthase subunit alpha (XCV0800)
SAH (RF01057)	976910-977023 (-)	977026 (5/0)	S-adenosyl-L-homocysteine hydrolase (XCV0856)
Glycine (RF00504)	1399365-1399480 (-)	1399557 (4/2)	Glycine dehydrogenase (XCV1243)
	1399482-1399550 (-)	-	Glycine dehydrogenase (XCV1243)
SAM (RF00162)	3610402-3610523 (-)	3610521 (53/4)	Homoserine O-acetyltransferase (XCV3177)
Cobalamin (RF00174)	3801922-3802147 (-)	-	TonB-dependent outer membrane receptor (XCV3323)
TPP (RF00059)	4100645-4100743 (-)	4100738 (25/1)	Thiamine biosynthesis protein ThiC (XCV3575)
YybP-ykoY candidate (RF00080)	4924876-4924995 (+)	-	Hypothetical/putative membrane protein (XCV4291)
YybP-ykoY candidate (RF00080)	5164221-5164342 (+)	5164230 (3/0)	Tellurium resistance export protein (XCV4477)
sRNA (Rfam entry)[a]	**Chromosomal position (strand)[b]**	**TSS position[c]**	**Chromosomal context[e]**
RNaseP bacterial (RF00010)	933945-934295 (+)	933943 (86/27)	*--> XCV0818 --> RNaseP --> XCV819*
RtT (RF00391)	1235501-1235623 (+)	-	*--> XCV1100 --> RtT --> XCV1101*
SRP bacterial (RF00169)	1241912-1242175 (-)	1242175 (91/11)	*--> XCV1109 <-- SRP <-- XCV1110*
tmRNA (RF00023)	1753051-1753447 (-)	1753470 (31/1)	*<-- XCV1553 <-- tmRNA --> XCV1554*
6S RNA (RF00013)	4037865-4038049 (+)	4037865 (2627/442)	*--> XCV3525 --> 6S RNA --> XCV3526*

[a], Putative riboswitches and widely conserved RNAs identified in *Rfam* database [see SI; (1)]. **[b]**, chromosomal position in *Xcv* corresponding to *Rfam* entry. **[c]**, TSS position in the *Xcv* chromosome (2). Numbers in brackets indicate read starts at TSS position (library 2/library 1). **[d]**, gene product of CDS annotated downstream of putative riboswitch (2). **[e]**, chromosomal orientation of sRNA gene and flanking CDSs indicated by arrows.

References

1. Gardner, P.P., Daub, J., Tate, J., Moore, B.L., Osuch, I.H., Griffiths-Jones, S., Finn, R.D., Nawrocki, E.P., Kolbe, D.L., Eddy, S.R. *et al.* (2010) Rfam: Wikipedia, clans and the "decimal" release. *Nucleic Acids Res.*, **39**, D141-145.
2. Thieme, F., Koebnik, R., Bekel, T., Berger, C., Boch, J., Büttner, D., Caldana, C., Gaigalat, L., Goesmann, A., Kay, S. *et al.* (2005) Insights into genome plasticity and pathogenicity of the plant pathogenic bacterium *Xanthomonas campestris* pv. vesicatoria revealed by the complete genome sequence. *J. Bacteriol.*, **187**, 7254-7266.

Table S7. RNAcode prediction of novel chromosomal ORFs in *Xcv* (1, 2). Alternative start codons are listed under "chromosomal position". RNAcode6 is highlighted in bold and corresponds to sX6 which was experimentally verified (see Figure 3).

RNAcode prediction	Chromosomal position (Strand)	Transcript Support[a]	TSS position[b]
RNAcode1	285154-285243 (+)	0/0	-
RNAcode2	465113-465232 (+)	0/0	-
RNAcode3	722692-722736 (+)	1/0	-
RNAcode4	1281664-1281846 (+)	1/1	-
	1281757-1281846 (+)		
RNAcode5	1435086-1435148 (+)	0/0	**-**
	1435113-1435148 (+)		
RNAcode6 (*sX6*)	**1971528-1971770 (+)**	**15/1**	**1971505**
	1971591-1971770 (+)		
RNAcode7	3457704-3457808 (+)	0/0	**-**
	3457734-3457808 (+)		
RNAcode8	3463701-3463796 (+)	3/4	**-**
	3463743-3463796 (+)		
RNAcode9	3727337-3727555 (+)	21/1	3727405
	3727361-3727555 (+)		
	3727445-3727555 (+)		
RNAcode10	3848998-3849048 (+)	1/0	-
RNAcode11	4083126-4083464 (+)	0/0	**-**
	4083348-4083464 (+)		
RNAcode12	4368388-4368489 (+)	0/4	-
RNAcode13	4545859-4545918 (+)	0/0	-
RNAcode14	5098317-5098562 (+)	0/0	**-**
	5098473-5098562 (+)		
RNAcode15	644457-644513 (-)	0/0	-
RNAcode16	1219379-1219462 (-)	0/0	**-**
	1219379-1219450 (-)		
RNAcode17	1360037-1360129 (-)	0/0	**-**
	1360037-1360120 (-)		
RNAcode18	2429470-2429610 (-)	0/0	**-**
	2429470-2429568 (-)		
RNAcode19	2602554-2602655 (-)	0/0	-
RNAcode20	3215182-3215274 (-)	1/0	**-**
	3215182-3215223 (-)		
RNAcode21	3408680-3408883 (-)	4/0	3408906
RNAcode22	3881142-3881246 (-)	2/0	-
RNAcode23	4104001-4104081 (-)	1/1	**-**
	4104001-4104060 (-)		
RNAcode24	5054413-5054448 (-)	1/0	-

[a], number of reads (library 2/library 1) mapped to the respective loci. [b], automatically annotated TSS (see Table S2); "-" no TSS identified.

References

1. Thieme, F., Koebnik, R., Bekel, T., Berger, C., Boch, J., Büttner, D., Caldana, C., Gaigalat, L., Goesmann, A., Kay, S. *et al.* (2005) Insights into genome plasticity and pathogenicity of the plant pathogenic bacterium *Xanthomonas campestris* pv. vesicatoria revealed by the complete genome sequence. *J. Bacteriol.*, **187**, 7254-7266.
2. Washietl, S., Findeiß, S., Müller, S.A., Kalkhof, S., von Bergen, M., Hofacker, I.L., Stadler, P.F. and Goldman, N. (2011) RNAcode: Robust discrimination of coding and noncoding regions in comparative sequence data. *RNA*, **17**, 578-594.

Table S8. Genome sequences used for the calculation of multiple sequence alignments.

NCBI ID	Species name
NC_008752.1	*Acidovorax avenae* subsp. *citrulli* AAC00-1, complete genome
NC_004547.2	*Erwinia carotovora* subsp. *atroseptica* SCRI1043, complete genome
NC_010943.1	*Stenotrophomonas maltophilia* K279a, complete genome
NC_011071.1	*Stenotrophomonas maltophilia* R551-3, complete genome
NC_002516.2	*Pseudomonas aeruginosa* PAO1, complete genome
NC_009656.1	*Pseudomonas aeruginosa* PA7, complete genome
NC_008463.1	*Pseudomonas aeruginosa* UCBPP-PA14, complete genome
NC_005773.3	*Pseudomonas syringae* pv. *phaseolicola* 1448A, complete genome
NC_007005.1	*Pseudomonas syringae* pv. *syringae* B728a, complete genome
NC_004578.1	*Pseudomonas syringae* pv. *tomato* DC3000, complete genome
NC_003295.1	*Ralstonia solanacearum* GMI1000, complete genome
NC_003919.1	*Xanthomonas axonopodis* pv. *citri* 306, complete genome
NC_003902.1	*Xanthomonas campestris* pv. *campestris* ATCC 33913, complete genome
NC_007086.1	*Xanthomonas campestris* pv. *campestris* 8004, complete genome
NC_007508.1	*Xanthomonas campestris* pv. *vesicatoria* 85-10, complete genome
NC_002488.3	*Xylella fastidiosa* 9a5c, complete genome
NC_004556.1	*Xylella fastidiosa* Temecula1, complete genome
NC_006834.1	*Xanthomonas oryzae* pv. *oryzae* KACC10331, complete genome
NC_007705.1	*Xanthomonas oryzae* pv. *oryzae* MAFF 311018, complete genome

Table S9. The extended two-by-two confusion matrix summarizes the predictive power of the automated TSS annotation approach. A subsample of the manually curated TSS map of *H. pylori* (1) was used as reference data set and evaluated with our method. The analyzed data-set contained 392 manually annotated TSSs. In total 566 genomic positions fulfilled the criteria (accumulation of at least three read starts) to be analyzed by our automated TSS annotation approach. According to Fawcett (2006), true positives (classified as TSS and also manually annotated) and false positives (classified as TSS but not manually annotated) as well as true negatives (neither classified as TSS nor manually annotated) and false negatives (not classified as TSS but manually annotated) were evaluated (2). Based on these values the calculated values for sensitivity, specificity as well as positive and negative predictive values are listed.

<table>
<tr><td></td><td colspan="2">Manually annotated TSSs
(392)</td><td></td></tr>
<tr><td rowspan="2">Automatic classification
(566)</td><td>True Positives: 321</td><td>False Positives: 124</td><td>Positive predictive value: 72%</td></tr>
<tr><td>False Negatives: 71</td><td>True Negatives: 50</td><td>Negative predictive value: 59%</td></tr>
<tr><td></td><td>Sensitivity: 82%</td><td>Specificity: 29%</td><td></td></tr>
</table>

References

1. Sharma, C.M., Hoffmann, S., Darfeuille, F., Reignier, J., Findeiss, S., Sittka, A., Chabas, S., Reiche, K., Hackermüller, J., Reinhardt, R. *et al.* (2010) The primary transcriptome of the major human pathogen *Helicobacter pylori*. *Nature*, **464**, 250-255.
2. Fawcett, T. (2006) An introduction to ROC analysis. *Pattern recognition letters*, **27**, 861-874.