

TABLE S10. Transposase genes within the *P. aminophilus* JCM 7686 genome.

Transposase gene	Truncated/c complete	IS name/ Tn name	IS family (IS group)/ Tn family	IS length/ Tn length	Insertion site of complete TEs	Replicon
JCM7686_pAMI1p053	complete	Tn3434a	Tn3	3695	putrescine transport system permease (<i>potB</i>) gene	pAMI1
JCM7686_pAMI2p013	complete	ISPam3	IS3 (IS407)	1197	gene encoding hypothetical protein	pAMI2
JCM7686_pAMI2p014	complete					
JCM7686_pAMI2p018	complete	ISPam4	IS5 (IS427)	865	intergenic region	pAMI2
JCM7686_pAMI2p019	complete					
JCM7686_pAMI4p209	complete	ISPam1	IS5 (IS903)	1050	intergenic region	pAMI4
JCM7686_pAMI4p225	complete	ISPam5	IS3 (IS407)	1197	intergenic region	pAMI4
JCM7686_pAMI4p226	complete					
JCM7686_pAMI4p304	truncated	N/A	IS1182	N/A	N/A	pAMI4
JCM7686_pAMI4p305	truncated	N/A	IS21	N/A	N/A	pAMI4
JCM7686_pAMI4p306	complete	ISPam5	IS3 (IS407)	1197	intergenic region	pAMI4
JCM7686_pAMI4p307	complete					
JCM7686_pAMI4p333	truncated	N/A	IS5 (IS427)	N/A	N/A	pAMI4
JCM7686_pAMI4p334	complete	ISPam5	IS3 (IS407)	1197	transposase gene	pAMI4
JCM7686_pAMI4p335	complete					
JCM7686_pAMI4p348	truncated	N/A	IS3 (IS150)	N/A	N/A	pAMI4
JCM7686_pAMI4p349	truncated	N/A	IS3 (IS150)	N/A	N/A	pAMI4
JCM7686_pAMI4p350	truncated	N/A	IS3 (IS150)	N/A	N/A	pAMI4
JCM7686_pAMI4p353	truncated	N/A	IS5 (IS903)	N/A	N/A	pAMI4
JCM7686_pAMI4p354	truncated	N/A	IS5 (IS903)	N/A	N/A	pAMI4
JCM7686_pAMI4p357	truncated	N/A	IS256	N/A	N/A	pAMI4
JCM7686_pAMI4p358	truncated	N/A	IS3 (IS51)	N/A	N/A	pAMI4
JCM7686_pAMI4p359	complete	ISPam5	IS3 (IS407)	1197	transposase gene	pAMI4
JCM7686_pAMI4p360	complete					
JCM7686_pAMI4p361	complete	ISPam6	IS1182	1657	intergenic region	pAMI4
JCM7686_pAMI5p071	truncated	N/A	IS5 (IS903)	N/A	N/A	pAMI5
JCM7686_pAMI5p092	complete	ISPam2	IS5 (IS903)	1054	ABC-type nitrate/sulfonate/bicarbonate transport system, ATPase gene	pAMI5
JCM7686_pAMI5p247	truncated	N/A	IS3 (IS407)	N/A	N/A	pAMI5
JCM7686_pAMI5p248	truncated	N/A	IS3 (IS407)	N/A	N/A	pAMI5
JCM7686_pAMI7p010	complete	Tn3434a	Tn3	3695	gene encoding hypothetical protein	pAMI7
JCM7686_pAMI8p011	complete	ISPam2	IS5 (IS903)	1054	DNA/RNA helicase (superfamily II, SNF2 family) gene	pAMI8
JCM7686_pAMI8p022	complete	ISPam7	IS3 (IS407)	1271	intergenic region	pAMI8
JCM7686_pAMI8p023						
JCM7686_pAMI8p024	truncated	N/A	ISL3	N/A	N/A	pAMI8

JCM7686_pAMI8p025 JCM7686_pAMI8p026	complete (frameshift)	<i>ISPam8</i>	IS66	2669	transposase gene	pAMI8
JCM7686_pAMI8p090	complete	N/A	IS3 (IS150)	N/A	N/A	pAMI8
JCM7686_pAMI8p091	truncated					
JCM7686_pAMI8p167	complete	<i>Tn3434a</i>	Tn3	3695	Na(+)-translocating NADH-quinone reductase subunit C gene	pAMI8
JCM7686_pAMI8p168	complete	<i>ISPam1</i>	IS5 (IS903)	1050	intergenic region	pAMI8
JCM7686_pAMI8p175	truncated	N/A	IS21	N/A	N/A	pAMI8
JCM7686_pAMI8p176	truncated	N/A	IS21	N/A	N/A	pAMI8
JCM7686_pAMI8p183	complete	<i>Tn3434a</i>	Tn3	3695	sodium/glutamate symporter gene	pAMI8
JCM7686_pAMI8p196	truncated	N/A	IS481	N/A	N/A	pAMI8
JCM7686_pAMI8p197	complete	<i>ISPam9</i>	IS110	N/A*	transposase gene	pAMI8
JCM7686_pAMI8p198	truncated	N/A	IS3 (IS51)	N/A	N/A	pAMI8
JCM7686_pAMI8p199	complete	<i>ISPam10</i>	IS5 (IS903)	1054	transposase gene	pAMI8
JCM7686_0276	complete	<i>ISPam5</i>	IS3 (IS407)	1197	transposase gene	chromosome
JCM7686_0277	complete					
JCM7686_0278	truncated	N/A	IS3 (IS407)	N/A	N/A	chromosome
JCM7686_0279	truncated	N/A	IS3 (IS407)	N/A	N/A	chromosome
JCM7686_0292	complete	<i>ISPam5</i>	IS3 (IS407)	1197	gene encoding hypothetical protein	chromosome
JCM7686_0293	complete					
JCM7686_1270	truncated	N/A	IS3 (IS51)	N/A	N/A	chromosome
JCM7686_1274	truncated	N/A	IS66	N/A	N/A	chromosome
JCM7686_1275	truncated					
JCM7686_1679	truncated	N/A	IS66	N/A	N/A	chromosome
JCM7686_1868	truncated	N/A	IS3 (IS407)	N/A	N/A	chromosome
JCM7686_1869	truncated					
JCM7686_2162	complete	<i>ISPam5</i>	IS3 (IS407)	1197	intergenic region	chromosome
JCM7686_2163	complete					
JCM7686_2224	truncated	N/A	IS3 (IS407)	N/A	N/A	chromosome
JCM7686_2225	truncated					
JCM7686_2291	complete	N/A	Mu-type	N/A	N/A	chromosome
JCM7686_2292	complete					
JCM7686_2296	complete	<i>ISPam11</i>	IS3 (IS51)	1219	transposase gene	chromosome
JCM7686_2297	complete					
JCM7686_2298	truncated	N/A	IS5 (IS427)	N/A	N/A	chromosome
JCM7686_2387	complete	<i>ISPam5</i>	IS3 (IS407)	1197	intergenic region	chromosome
JCM7686_2388	complete					
JCM7686_2390	truncated	N/A	IS21	N/A	N/A	chromosome
JCM7686_2391	truncated					

* Since ISs of the IS110 family do not have IRs, and do not generate DRs, it is not possible to determine the length of *ISPam9*.