

Table S1. *lasR* sequence characterization of all 205 isolates in this study

Isolate designation	<i>lasR</i> associated mutation	Nucleotide change	Amino acid change
E01	whole gene deletion		
E02	whole gene deletion		
E03	whole gene deletion		
E04	whole gene deletion		
E05	whole gene deletion		
E06	whole gene deletion		
E07	whole gene deletion		
E08	whole gene deletion		
E09	whole gene deletion		
E10	whole gene deletion		
E11	whole gene deletion		
E12	whole gene deletion		
E13	whole gene deletion		
E14	whole gene deletion		
E15	whole gene deletion		
E16	whole gene deletion		
E17	whole gene deletion		
E18	whole gene deletion		
E19	whole gene deletion		
E20	whole gene deletion		
E21	whole gene deletion		
E22	whole gene deletion		
E23	whole gene deletion		
E24	whole gene deletion		
E25	whole gene deletion		
E26	whole gene deletion		
E27	whole gene deletion		
E28	whole gene deletion		
E29	whole gene deletion		
E30	Non-synonymous	G377A	G126D
E31	Non-synonymous	C133T	Q45Stop
E32	Non-synonymous	C649T	R217W
E33	Non-synonymous	G61A	A21T
E34	Non-synonymous	C292T	Q98Stop
E35	Insertion	IS Element @ 563	IS Element
E36	Deletion	13 bp deletion @ 493 (-CTGGCCTTCGAAC)	Frameshift
E37	Non-synonymous	G588T	E196D
E38	Deletion	11 bp deletion @ 98 (-CGAAGATCCTG)	Frameshift
E39	Non-synonymous	G541A	E181K
E40	Non-synonymous	C670T	R224C
E41	Non-synonymous	G31T	E11Stop
E42	Non-synonymous	G671A	R224H
E43	Deletion	1 bp deletion @ 407 (-A)	Frameshift
E44	Non-synonymous	C221T	P74L
E45	Non-synonymous	C70T	Q24Stop
E46	Deletion	3 bp deletion @ 349 (-CCG)	1 aa deletion (-P117)

E47	Insertion			Frameshift
E48	Non-synonymous	1 bp insertion @ 342 (+T)	C181A	R61S
E49	Non-synonymous		G56A	W19Stop
E50	Non-synonymous		C564A	C188Stop
E51	Wildtype		Wildtype	Wildtype
E52	Non-synonymous		C706T	L236F
E53	Insertion	IS Element @ 129		IS Element
E54	Non-synonymous		C350T	P117L
E55	Non-synonymous		G386A	S129N
E56	Non-synonymous		G338A	G113E
E57	Non-synonymous		G307T	E103Stop
E58	Non-synonymous		C692T	A231V
E59	Non-synonymous		A625G	N209D
E60	Non-synonymous		T68G	L23R
E61	Non-synonymous		T707G	L236R
E62	Non-synonymous		A467T	D156V
E63	Non-synonymous		A653G	K218R
E64	Deletion	5 bp deletion @ 445 (-CCGAC)		Frameshift
E65	Non-synonymous		G616A	A206T
E66	Non-synonymous		C221A	P74Q
E67	Non-synonymous		G179A	W60Stop
E68	Non-synonymous		T227G	V76G
E69	Non-synonymous		C611A	S204Stop
E70	Non-synonymous		C631A	H211N
E71	Non-synonymous		T592C	S198P
E72	Non-synonymous		C556T	Q186Stop
E73	Non-synonymous		G622A	V208M
E74	Non-synonymous		G676	V226I
E75	Non-synonymous		C670A	R224S
E76	Non-synonymous		G184C	E62Stop
E77	Non-synonymous		G571A	G191S
E78	Non-synonymous		C665T	T222I
E79	Insertion	IS Element @ 130		IS Element
E80	Deletion	4 bp deletion @ 319 bp (-GGCC)		Frameshift
E81	Deletion	13 bp deletion @ 389 (-TCAGCGTGGAAGC)		Frameshift
E82	Insertion	IS Element @ 630		IS Element
E83	Non-synonymous		C413T	A138V
E84	Non-synonymous		G704C	G235A
E85	Insertion	IS Element @ 143		IS Element
E86	Deletion	11 bp deletion @ 97 (-TCGAAGATCCT)		Frameshift
E87	Insertion	IS Element @ 241		IS Element
E88	Non-synonymous		C692A	A231D
E89	Non-synonymous		G543C	E181D
E90	Deletion	1 bp deletion @ 170 (-C)		Frameshift
E91	Insertion	IS Element @ 705		IS Element
E92	Non-synonymous		G490T	G164Stop
E93	Insertion	IS Element @ 140		IS Element
E94	Insertion	IS Element @ 139		IS Element
E95	Non-synonymous		G671T	R224L

E96	Insertion	IS Element @ 266	IS Element
E97	Insertion	IS Element @ 600	IS Element
E98	Insertion	1 bp insertion @ 415 (+C)	Frameshift
E99	Non-synonymous	T629G	F210C
E100	Non-synonymous	A641G	N214S
E101	Deletion	1 bp deletion @ 422 (-A)	Frameshift
E102	Non-synonymous	C646T	R216W
E103	Non-synonymous	T68C	L23P
E104	Non-synonymous	A532G	T178A
E105	Deletion	2 bp deletion @ 2 (-TG)	Frameshift
E106	Non-synonymous	C239T	T80I
E107	Non-synonymous	G539A	R180Q
E108	Non-synonymous	C355T	H119Y
E109	Non-synonymous	A223C	T75P
E110	Non-synonymous	G25A	E9K
E111	Non-synonymous	A542G	E181G
E112	Insertion	IS Element @ 716	IS Element
E113	Non-synonymous	T55C	W19R
E114	Insertion	1 bp insertion @ 452 (+C)	Frameshift
E115	Non-synonymous	C220T	P74S
E116	Non-synonymous	C683A	A228D
E117	Non-synonymous	A712G	T238A
E118	Insertion	1 bp insertion @ 449 (+C)	Frameshift
E119	Insertion	IS Element @ 463	IS Element
E120	Insertion	8 bp insertion @ 639 (+CATATGGG)	Frameshift
E121	Non-synonymous	G376T	G126C
E122	Non-synonymous	G92T	G31V
E123	Non-synonymous	C617T	A206V
E124	Non-synonymous	G376A	G126S
E125	Non-synonymous	C280T	Q94Stop
E126	Non-synonymous	G654T	K218N
E127	Non-synonymous	C564G	C188W
E128	Insertion	IS Element @ 551	IS Element
E129	Non-synonymous	C149T	A50V
E130	Non-synonymous	T662A	V221E
E131	Non-synonymous	A580G	S194G
E132	Insertion	1 bp insertion @ 173 (+G)	Frameshift
E133	Non-synonymous	G313A	A105T
E134	Non-synonymous	C683T	A228V
E135	Deletion	30 bp deletion @ 604 (-AACTGCTCGGAAGCCAATGTGAACTTCCAT)	10 aa deletion (-NCSEANVNHF 201-212)
E136	Deletion	11 bp deletion @ 423 (-CCGTTTCATGG)	Frameshift
E137	Non-synonymous	G455A	W152Stop
E138	Deletion	14 bp deletion @ 565 (-GCCATCGGCAAGAC)	Frameshift
E139	Non-synonymous	T178G	W60G
E140	Deletion	1 bp deletion @ 564 (-C)	Frameshift
E141	Insertion	42 bp insertion @ 141 (+GAAGATCCTGTTCGGCCTTGCCTAAGGACAGCCAGGACTA)	Stop + 7 aa insertion @ 47 (**KILFGLLPKDSQD)
E142	Non-synonymous	C219A	D73E
E143	Non-synonymous	A605T	N202I
E144	Non-synonymous	G585A	W195Stop

E145	Non-synonymous	C219G	D73E
E146	Non-synonymous	G638A	G213E
E147	Deletion	2 bp deletion @ 562 (-TG)	Frameshift
E148	Non-synonymous	C165A	N55K
E149	Deletion	1 bp deletion @ 337 (-G)	Frameshift
E150	Non-synonymous	G377C	G126A
E151	Non-synonymous	G199C	A67P
E152	Non-synonymous	G182A	R61H
E153	Insertion	IS Element @ 647	IS Element
E154	Non-synonymous	C350T	P117L
E155	Non-synonymous	T559C	W187R
E156	Non-synonymous	G226T	V76F
E157	Deletion	1 bp deletion @ 414 (-C)	Frameshift
E158	Non-synonymous	G661A	V221M
E159	Non-synonymous	G264A	W88Stop
E160	Insertion	3 bp insertion @ 334 (+TTG)	1 aa insertion @ 112 (+L)
E161	Insertion	1 bp insertion @ 452 (+A)	Frameshift
E162	Non-synonymous	C529G	L177V
E163	Non-synonymous	G691A	A231T
E164	Non-synonymous	G415T	E139Stop
E165	Non-synonymous	G703A	G235S
E166	Non-synonymous	G654C	K218N
E167	Deletion	1 bp deletion @ 339 (-G)	Frameshift
E168	Non-synonymous	T707C	L236P
E169	Non-synonymous	C437A	S146Stop
E170	Insertion	24 bp insertion @ 355 (+GTGTATGGGCTGACCATGCCGCTG)	8 aa insertion @ 119 (+VYGLTMPL)
E171	Non-synonymous	T316C	S106P
E172	Non-synonymous	G57A	W19Stop
E173	Deletion	10 bp deletion @ 583 (-TGGGAGATAT)	Frameshift
E174	Non-synonymous	T583A	W195R
E175	Deletion	1 bp deletion @ 663 (-G)	Frameshift
E176	Deletion	10 bp deletion @ 627 (-CTTCCATATG)	Frameshift
E177	Non-synonymous	G386A	S129N
E178	Non-synonymous	G319C	A107P
E179	Non-synonymous	G560A	W187Stop
E180	Non-synonymous	G547A	E183K
E181	Insertion	IS Element @ 561	IS Element
E182	Insertion	4 bp insertion @ 580 (+GACC)	Frameshift
E183	Non-synonymous	C478T	Q160Stop
E184	Non-synonymous	G337C	G113R
E185	Non-synonymous	C668A	S223Y
E186	Non-synonymous	C314T	A105V
E187	Insertion	IS Element @ 239	IS Element
E188	Non-synonymous	T452C	L151P
E189	WT		
E190	WT		
E191	WT		
E192	WT		
E193	WT		

E194	WT		
E195	WT		
E196	WT		
E197	WT		
E198	WT		
E199	Insertion	1 bp insertion @ 281 (+C)	Frameshift
E200	Non-synonymous	G217A	D73N
E201	Non-synonymous	T607A	C203S
E202	Insertion	IS Element @ 467	IS Element
E203	Non-synonymous	G682C	A228P
E204	Non-synonymous	C254T	P85L
E205	Deletion	3 bp deletion @ 637 (-GGA) + A640G	1 aa deletion (-G213) + N214D