

Table S1: SNP changes observed in the P30M0 lineage.

Branch ^a	Position	Type of mutation	Gene name	Product	PseudoCAP Function Class
listA	T163P	Missense	PA0652 vfr	transcriptional regulator Vfr	Transcriptional regulators
listA	L7L	Silent	PA4695 ilvH		
listA	R12L	Missense	PA1430 lasR	transcriptional regulator LasR	
listA	G476S	Missense	PA0928 gacS	sensor/response regulator hybrid	Two-component regulatory systems
listA	A19P	Missense	PA2020	probable transcriptional regulator	Transcriptional regulators
listB	G505A	Missense	PA3545 algG	alginate-c5-mannuronan-epimerase AlgG	
listB	G10G	Silent	PA4755 greA	transcription elongation factor GreA	Transcription, RNA processing and degradation
listC	P515P	Silent	PA14_03220	Hypothetical protein	Hypothetical, unclassified, unknown
listC	S480S	Silent	PA0262	conserved hypothetical protein	Hypothetical, unclassified, unknown
listC		31 Not annotated			
listC	A28P	Missense	PA3897	hypothetical protein	Membrane proteins
listC	Y59C	Missense	PA0762 algU	sigma factor AlgU	Transcriptional regulators
listC	R527H	Missense	PA3257 prc	periplasmic tail-specific protease	
listC	T57T	Silent	PA3399	hypothetical protein	Hypothetical, unclassified, unknown
listD	G73G	Silent	PA4286	hypothetical protein	Hypothetical, unclassified, unknown
listD	A380A	Silent	PA1238		
listD	K55K	Silent	PA3127	hypothetical protein	Hypothetical, unclassified, unknown
listD	A168V	Missense	PA0021	conserved hypothetical protein	Membrane proteins
listD	L10Q	Missense	PA5537	hypothetical protein	Hypothetical, unclassified, unknown
listD	L435L	Silent	PA2840	probable ATP-dependent RNA helicase	Transcription, RNA processing and degradation
listE	I65I	Silent	PA1192	conserved hypothetical protein	Hypothetical, unclassified, unknown
listI	L117F	Missense	PA2196	probable transcriptional regulator	Transcriptional regulators
listI	11717	Intergenic	PA1566//	15 upstream conserved hypothetical protein/453	Hypothetical, unclassified, unknown/Hypothetic
listI	N208N	Silent	PA1588 sucC	succinyl-CoA synthetase beta chain	Energy metabolism
listI	D184N	Missense	PA1775 cmpX		Membrane proteins
listJ	D18G	Missense	PA0762 algU	sigma factor AlgU	Transcriptional regulators
listKA	R504C	Missense	PA4418 ftsI	penicillin-binding protein 3	Cell division; Cell wall / LPS / capsule
listKB	G344G	Silent	PA4900		
listKB	T122T	Silent	PA4089	probable short-chain dehydrogenase	Putative enzymes
listKB	235	Silent	PA1094 fliD	flagellar capping protein FliD	
listKB	V193M	Missense	PA2329		Transport of small molecules
listKB	V849G	Missense	PA3168 gyrA	DNA gyrase subunit A	
listKB	G118S	Missense	PA4266 fusA1	elongation factor G	
listKB	G301R	Missense	PA4860	probable permease of ABC transporter	
listKB	A379V	Missense	PA0835 pta	phosphate acetyltransferase	Carbon compound catabolism
listKB	H162R	Missense	PA4954 motA	chemotaxis protein MotA	Adaptation, Protection; Chemotaxis
listKB	T213T	Silent	PA1818 ldcA		Amino acid biosynthesis and metabolism
listKB	E182K	Missense	PA1810		Transport of small molecules
listKB	P230P	Silent	PA4811 fdnH		Energy metabolism
listKB	R243C	Missense	PA4843	probable two-component response regulator	
listKC	A8T	Missense	PA3951	conserved hypothetical protein	Hypothetical, unclassified, unknown
listKC	H261L	Missense	PA3878 narX	two-component sensor NarX	
listKC	D292A	Missense	PA5320 coaC		
listKC	L39L	Silent	PA0761 nadB	L-aspartate oxidase	
listKC	L32L	Silent	PA1121 yfiR	YfiR	Cell wall / LPS / capsule
listKC	Y196_	Nonsense	PALES_4: oprD		Transport of small molecules
listKC	F190F	Silent	PA2069	probable carbamoyl transferase	Putative enzymes
listKC	P36L	Missense	PA2674	probable type II secretion system protein	Protein secretion/export apparatus
listKD	124819	Intergenic	PA2138//	16 downstream probable ATP-dependent DNA lig	Hypothetical, unclassified, unknown
listKE	P353L	Missense	PA3162 rpsA	30S ribosomal protein S1	
listKE	8641	Intergenic	PA1563//	38 downstream conserved hypothetical protein/4	Hypothetical, unclassified, unknown/Hypothetic
listKF	R160R	Silent	PA2156	conserved hypothetical protein	Hypothetical, unclassified, unknown
listKG	4965	Not annotated			
listKG	20159	Intergenic	PA0915//	59 upstream conserved hypothetical protein/3 do	Hypothetical, unclassified, unknown/Hypothetic
listKH	T84P	Missense	PA4310 pctB	chemotactic transducer PctB	Adaptation, Protection; Chemotaxis
listKH	7743	Intergenic	PA4610//	45 downstream hypothetical protein/17 downstre	Hypothetical, unclassified, unknown/Hypothetic
listKH	L666L	Silent	PA1181	conserved hypothetical protein	Membrane proteins
listKH	V255V	Silent	PA0687	probable type II secretion system protein	Protein secretion/export apparatus
listL	E572K	Missense	PA14_03220	Hypothetical protein	Hypothetical, unclassified, unknown
listL	R40C	Missense	PA4499	probable transcriptional regulator	Transcriptional regulators
listM	R21P	Missense	PA2537	probable acyltransferase	Fatty acid and phospholipid metabolism

listM	G107R	Missense	PA1923	hypothetical protein	
listM	S190S	Silent	PA4809	fdhE FdhE protein	Energy metabolism
listM	T345P	Missense	PA3464	hypothetical protein	Hypothetical, unclassified, unknown
listM	N545K	Missense	PA1992	ercS ErcS	Two-component regulatory systems
listN	G641G	Silent	PA4021	probable transcriptional regulator	Transcriptional regulators
listN	Y258Y	Silent	PA0091	vgrG1 VgrG1	Hypothetical, unclassified, unknown
listO	A431T	Missense	PA5338	spoT	
listO	Y59_	Nonsense	PA0762	algU sigma factor AlgU	Transcriptional regulators
listO	G72G	Silent	PA0136		Transport of small molecules
listPA	P113L	Missense	PA2687	pfeS two-component sensor PfeS	Two-component regulatory systems
listPA	A3021A	Silent	PA2424	pvdL PvdL	Adaptation, Protection
listPA	S173L	Missense	PA0762	algU sigma factor AlgU	Transcriptional regulators
listPA	R40Q	Missense	PA3304	conserved hypothetical protein	Hypothetical, unclassified, unknown
listPB	A1060A	Silent	PA14_36730	putative trehalose synthase	Carbon compound catabolism
listPB	L49L	Silent	PA4815	hypothetical protein	Membrane proteins
listPC	L273L	Silent	PA2776	conserved hypothetical protein	Hypothetical, unclassified, unknown
listPC	A115A	Silent	PA2925	hisM histidine transport system permease HisM	
listPD	G345D	Missense	PA2597	hypothetical protein	Putative enzymes
listPE	G308S	Missense	PA0368	conserved hypothetical protein	Hypothetical, unclassified, unknown
listPF	1786	Intergenic	PA4109/ampR/	104 upstream transcriptional regulator AmpR/45	Transcriptional regulators/Adaptation, Protection
listPF	A55V	Missense	PA0607	rpe ribulose-phosphate 3-epimerase	Energy metabolism
listPF	A775A	Silent	PA0903	alaS alanyl-tRNA synthetase	
listPF	29218	Intergenic	PA2330//	7 upstream hypothetical protein/43 downstream	Hypothetical, unclassified, unknown/Membrane
listPF	I208I	Silent	PA5320	coaC	
listPG	A289V	Missense	PA2998	nqrB	Energy metabolism
listPG	D277N	Missense	PA3547	algL poly(beta-d-mannuronate) lyase precursor AlgL	
listPG	V278M	Missense	PA4102	bfmS BfmS	
listPG	11767	Intergenic	PA1499//	256 upstream conserved hypothetical protein/41	Putative enzymes/Putative enzymes
listPG	Q185_	Nonsense	PA4410	ddlB D-alanine--D-alanine ligase	Cell wall / LPS / capsule
listPG	G257R	Missense	PA4418	ftsI penicillin-binding protein 3	Cell division; Cell wall / LPS / capsule
listPG	G75S	Missense	PA3168	gyrA DNA gyrase subunit A	
listPG	17777	Intergenic	PA3168/gyrA/	228 upstream DNA gyrase subunit A/9 downstream /	
listPG	K95N	Missense	PA4248	rplF 50S ribosomal protein L6	
listPG	D467G	Missense	PA4266	fusA1 elongation factor G	
listPG	G132G	Silent	PA5103	hypothetical protein	Hypothetical, unclassified, unknown
listPG	F779S	Missense	PA0004	gyrB DNA gyrase subunit B	
listPG	85377	Not annotated			
listPG	H104Y	Missense	PA1167	hypothetical protein	Hypothetical, unclassified, unknown
listPG	Q402_	Nonsense	PA0411	pilJ twitching motility protein PilJ	Chemotaxis; Motility & Attachment
listPG	P221P	Silent	PA1459	probable methyltransferase	Chemotaxis
listPG	N141D	Missense	PA1775	cmpX	Membrane proteins
listPG	T1282I	Missense	PA2424	pvdL PvdL	Adaptation, Protection
listPG	S59L	Missense	PA2426	pvdS sigma factor PvdS	Transcriptional regulators
listPG	S280L	Missense	PA3267	hypothetical protein	Membrane proteins
listPG	P71L	Missense	PA3385	amrZ alginate and motility regulator Z	
listPG	P358P	Silent	PA3339	PlpD patatin-like protein, PlpD	
listPG	A28A	Silent	PA5039	aroK shikimate kinase	Amino acid biosynthesis and metabolism
listPG	P149L	Missense	PA5034	hemE uroporphyrinogen decarboxylase	
listPG	G543E	Missense	PA3141	wbpM nucleotide sugar epimerase/dehydratase WbpM	
listPG	4892	Not annotated			
listPG	R61H	Missense	PA0337	ptsP	Transport of small molecules
listPG	A72T	Missense	PA0204	probable permease of ABC transporter	
listPG	A419A	Silent	PA2652	probable chemotaxis transducer	Adaptation, Protection; Chemotaxis
listPG	V135M	Missense	PA2620	clpA ATP-binding protease component ClpA	
listPG	R84H	Missense	PA2837	probable outer membrane protein precursor	Transport of small molecules
listPG	E267K	Missense	PA5241	ppx exopolyphosphatase	
listPG	R19R	Silent	PA4785	probable acyl-CoA thiolase	Putative enzymes
listPG	P330P	Silent	PA1255	hypothetical protein	Hypothetical, unclassified, unknown
listPH	T296T	Silent	PA5013	ilvE branched-chain amino acid transferase	Amino acid biosynthesis and metabolism
listPH	S466A	Missense	PA0004	gyrB DNA gyrase subunit B	
listPH	L345L	Silent	PA2059	probable permease of ABC transporter	
listPI	D18G	Missense	PA0762	algU sigma factor AlgU	Transcriptional regulators
listQ	25053	Not annotated			
listR	E258Q	Missense	PA4670	prs ribose-phosphate pyrophosphokinase	
listS	M332I	Missense	PA5035	gltD glutamate synthase small chain	Amino acid biosynthesis and metabolism

listXB	A112T	Missense	PA5133	conserved hypothetical protein	Membrane proteins
listXB	22058	Intergenic	PA1578//	10 downstream hypothetical protein/482 upstrea	Hypothetical, unclassified, unknown/Hypothetic
listXB	V163G	Missense	PA1833	probable oxidoreductase	Putative enzymes
listXB	S36_	Nonsense	PA4661 pagL	Lipid A 3-O-deacylase	Hypothetical, unclassified, unknown
listXB	H269Q	Missense	PA4666 hemA	glutamyl-tRNA reductase	
listXB	D106N	Missense	PA0705 migA	alpha-1,6-rhamnosyltransferase MigA	Putative enzymes; Cell wall / LPS / capsule
listXB	72043	Intergenic	PA2894//	40 upstream hypothetical protein/306 downstrea	Hypothetical, unclassified, unknown/Hypothetic
listXC	H215Y	Missense	PA4110 ampC	beta-lactamase precursor	Adaptation, Protection
listXC	P534S	Missense	PA3545 algG	alginate-c5-mannuronan-epimerase AlgG	
listXC	H353H	Silent	PA1331	conserved hypothetical protein	Hypothetical, unclassified, unknown
listXC	Q37Q	Silent	PA3103 xcpR	general secretion pathway protein E	Protein secretion/export apparatus
listXC	A461V	Missense	PA4228 pchD	pyochelin biosynthesis protein PchD	
listXC	19417	Intergenic	PA4709//phuR	128 upstream probable hemin degrading factor/5	Putative enzymes/Transport of small molecules
listXC	11844	Intergenic	PA5136//	12 downstream hypothetical protein/25 downstre	Hypothetical, unclassified, unknown/Hypothetic
listXC	V452V	Silent	PA5554 atpD	ATP synthase beta chain	Energy metabolism
listXC	R25H	Missense	PA2109	hypothetical protein	Hypothetical, unclassified, unknown
listXC	R808H	Missense	PA3297	probable ATP-dependent helicase	Transcription, RNA processing and degradation
listXC	G94D	Missense	PA3432	hypothetical protein	Membrane proteins
listXC	I16I	Silent	PA4827	arylamine N-acetyltransferase	Adaptation, Protection; Putative enzymes
listXC	T250M	Missense	PA3593	probable acyl-CoA dehydrogenase	Putative enzymes
listZZ	A71A	Silent	PA1095	hypothetical protein	Hypothetical, unclassified, unknown
listZZ	P31P	Silent	PA14_58740	hypothetical protein	Hypothetical, unclassified, unknown
listZZ	I61I	Silent	PA2185 katN	non-heme catalase KatN	Adaptation, Protection
listZZ	T74I	Missense	PA1583 sdhA	succinate dehydrogenase (A subunit)	Energy metabolism
listZZ	S372S	Silent	PA0172	hypothetical protein	Hypothetical, unclassified, unknown
listZW	A182A	Silent	PA3541 alg8	alginate biosynthesis protein Alg8	
listZW	Q10_	Nonsense	PA0789	probable amino acid permease	
listZW	H102Q	Missense	PA4726 cbrB	two-component response regulator CbrB	
listZW	V79V	Silent	PA0749	hypothetical protein	Hypothetical, unclassified, unknown
listZW	A192V	Missense	PA3232	probable nuclease	Putative enzymes
listZW	T149P	Missense	PA1696 pscO	translocation protein in type III secretion	Protein secretion/export apparatus
listZW	L42L	Silent	PA0337 ptsP		Transport of small molecules
listZW	56672	Intergenic	PA2634//aceA/	178 downstream isocitrate lyase AceA/1 upstrea	Putative enzymes/Hypothetical, unclassified, un
listZW	72043	Intergenic	PA2894//	40 upstream hypothetical protein/306 downstrea	Hypothetical, unclassified, unknown/Hypothetic

^aBranch names are denoted in the phylogenetic tree in Figure 2.