

Table S3A. Distribution of origin species and function

Origin species and function prediction were taken from closest similar function predictions were summarized in categories (e.

origin species	count
strain AA2 (69 protein homologues)	
<i>Pseudomonas aeruginosa</i>	56
<i>Comamonas testosteroni</i>	1
<i>Methylosinus trichosporium</i>	1
<i>Neisseria mucosa</i>	1
<i>Polaromonas sp.</i>	3
<i>Providencia burhododranaria</i>	2
<i>Pseudomonas fluorescens</i>	2
<i>Pseudomonas mendocina</i>	1
<i>Pseudomonas stutzeri</i>	1
<i>Pseudomonas syringae</i>	1

strain HK3 (120 protein homologues)

<i>Pseudomonas aeruginosa</i>	99
<i>Pseudomonas sp.</i>	4
<i>Pseudomonas fluorescens</i>	2
<i>Pseudomonas stutzeri</i>	2
<i>Salmonella enterica subsp. enterica se2</i>	
<i>Achromobacter piechaudii</i>	1
<i>Actinobacillus pleuropneumoniae serov1</i>	
<i>Desulfovibrio desulfuricans</i>	1
<i>Methylobacterium alcaliphilum</i>	1
<i>Oceanicaulis sp.</i>	1
<i>Pseudomonas pseudoalcaligenes</i>	1
<i>Pseudomonas putida</i>	1
<i>Pseudomonas savastanoi pv. savastar1</i>	
<i>Pseudomonas viridiflava</i>	1
<i>Ralstonia syzygii</i>	1
<i>Rhizobium leguminosarum bv. viciae</i>	1

strain KB1 (77 protein homologues)

<i>Pseudomonas aeruginosa</i>	64
<i>Pseudomonas sp.</i>	4
<i>Pseudomonas fluorescens</i>	2
<i>Pseudomonas mendocina</i>	2
<i>Pseudomonas fulva</i>	1
<i>Pseudomonas psychrotolerans</i>	1
<i>Pseudomonas putida</i>	1
<i>Pseudomonas stutzeri</i>	1
<i>Polaromonas sp.</i>	1

strain KK1 (164 protein homologues)

<i>Pseudomonas aeruginosa</i>	133
<i>Pseudomonas sp.</i>	5
<i>Pseudomonas putida</i>	5
<i>Pseudomonas chlororaphis subsp. aur3</i>	
<i>Pseudomonas stutzeri</i>	3
<i>Pseudomonas fluorescens</i>	2
<i>Pseudomonas brassicacearum</i>	2
<i>Pseudomonas entomophila</i>	1
<i>Pseudomonas fulva</i>	1
<i>Pseudomonas pseudoalcaligenes</i>	1
<i>Pseudomonas syringae</i>	1
<i>Ralstonia metallidurans</i>	1
<i>Stenotrophomonas maltophilia</i>	1
<i>Acidovorax sp.</i>	1
<i>Bradyrhizobium sp.</i>	1
<i>Burkholderia thailandensis</i>	1
<i>Mariprofundus ferrooxydans</i>	1
<i>Methylococcus capsulatus</i>	1

strain MF1 (157 protein homologues)

<i>Pseudomonas aeruginosa</i>	132
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<i>Pseudomonas syringae</i>	4
<i>Pseudomonas sp.</i>	3
<i>Pseudomonas fluorescens</i>	2
<i>Ralstonia metallidurans</i>	2
<i>Pseudomonas mendocina</i>	1
<i>Pseudomonas pseudoalcaligenes</i>	1
<i>Pseudomonas putida</i>	1
<i>Aeromonas hydrophila</i>	1
<i>Alicyclophilus denitrificans</i>	1
<i>Cardiobacterium hominis</i>	1
<i>Cupriavidus oxalaticus</i>	1
<i>Delftia acidovorans</i>	1
<i>Enterobacter cloacae</i>	1
<i>Janthinobacterium sp.</i>	1
<i>Salmonella enterica subsp. enterica se</i>	1
<i>Shewanella denitrificans</i>	1
<i>Xanthomonas citri pv. mangiferaeindica</i>	1
<i>Xanthomonas oryzae pv. oryzae</i>	1

strain NA1 (81 protein homologues)

<i>Pseudomonas aeruginosa</i>	60
<i>Pseudomonas putida</i>	6
<i>Stenotrophomonas maltophilia</i>	3
<i>Pseudomonas fluorescens</i>	2
<i>Pseudomonas sp.</i>	2
<i>Pseudomonas syringae</i>	1
<i>Pseudomonas fulva</i>	1
<i>Enterobacter cloacae</i>	1
<i>Escherichia coli</i>	1
<i>Shewanella baltica</i>	1
<i>Sideroxydans lithotrophicus</i>	1
<i>Xanthomonas albilineans</i>	1

strain NM1 (192 protein homologues)

<i>Pseudomonas aeruginosa</i>	152
<i>Pseudomonas stutzeri</i>	12
<i>Pseudomonas sp.</i>	6
<i>Pseudomonas putida</i>	5
<i>Pseudomonas chlororaphis</i>	3
<i>Pseudomonas syringae</i>	2
<i>Burkholderia sp.</i>	2
<i>Pseudomonas fluorescens</i>	1
<i>Aromatoleum aromaticum</i>	1
<i>Bermanella marisrubri</i>	1
<i>Bordetella petrii</i>	1
<i>Brenneria sp.</i>	1
<i>Herminiimonas arsenicoxydans</i>	1
<i>Methylobacillus flagellatus</i>	1
<i>Nitrosococcus oceani</i>	1
<i>Shewanella pealeana</i>	1
<i>Sorangium cellulosum</i>	1

strain RP1 (191 protein homologues)

<i>Pseudomonas aeruginosa</i>	174
<i>Pseudomonas putida</i>	4
<i>Pseudomonas sp.</i>	3
<i>Burkholderia vietnamiensis</i>	2
<i>Desulfovibrio aespoeensis</i>	2
<i>Pseudomonas synxantha</i>	1
<i>Pseudomonas syringae</i>	1
<i>Aeromonas salmonicida</i>	1
<i>Oligotropha carboxidovorans</i>	1
<i>Oxalobacter formigenes</i>	1
<i>Ralstonia metallidurans</i>	1

strain ST1 (109 protein homologues)

<i>Pseudomonas aeruginosa</i>	102
<i>Pseudomonas putida</i>	2
<i>Pseudomonas syringae</i>	2
<i>Pseudomonas stutzeri</i>	1
<i>Delftia acidovorans</i>	1
<i>Pseudoalteromonas sp.</i>	1

strain TR1 (143 protein homologues)

<i>Pseudomonas aeruginosa</i>	127
<i>Pseudomonas syringae</i>	4
<i>Pseudomonas stutzeri</i>	3
<i>Pseudomonas sp.</i>	2
<i>Providencia burhodogranariea</i>	2

<i>Pseudomonas fluorescens</i>	1
<i>Pseudomonas putida</i>	1
<i>Pseudomonas savastanoi</i> pv. <i>savastari</i>	1
<i>Bordetella petrii</i>	1
<i>Escherichia coli</i>	1

strain WU2 (138 protein homologues)

<i>Pseudomonas aeruginosa</i>	123
<i>Pseudomonas</i> sp.	4
<i>Acidovorax</i> sp.	4
<i>Pseudomonas avellanae</i>	1
<i>Pseudomonas stutzeri</i>	1
<i>Pseudomonas syringae</i>	1
<i>Achromobacter piechaudii</i>	1
<i>Anaeromyxobacter</i> sp.	1
<i>Manganese-oxidizing bacterium</i>	1
<i>Nitrococcus mobilis</i>	1

1 predictions for homologues of accessory genome ORFs of *P. aeruginosa* strains

: homologues found by blastx comparisons against bacterial proteins in the UniProt database.

g. "putative/uncharacterized/hypothetical protein", "LPS/O-antigen biosynthesis", "metal resistance")

function prediction	count
(putative) uncharacterized or hypothetical protein	40
Type 4 fimbrial / Pilus biogenesis	6
Integrase/Transposase	4
LPS/O-antigen biosynthesis	4
Hemagglutinin/Adhesin	3
transporter component	2
phage protein	1
3-deoxy-manno-octulosonate cytidyltransferase	1
5'-nucleotidase	1
AraC family transcriptional regulator	1
DNA adenine methylase	1
Exoenzyme S	1
Non-heme catalase KatN	1
Phytoene dehydrogenase	1
Probable glycosyl transferase	1
Probable two-component sensor	1

(putative) uncharacterized or hypothetical protein	61
phage protein	9
Integrase/Transposase	8
metal resistance	7
transporter component	5
Type 4 fimbrial / Pilus biogenesis	3
flagella biosynthesis	3
transcriptional regulator	3
LPS/O-antigen biosynthesis	1
3-oxoacyl-(Acyl-carrier-protein) synthase	1
ATP-dependent Clp protease proteolytic subunit	1
ATP-dependent endonuclease family protein	1
Crossover junction endodeoxyribonuclease	1
Cupin 4 family protein	1
DNA repair protein RadC	1
DNA topoisomerase	1
Helicase domain-containing protein	1
NADPH-dependent FMN reductase	1

ORF_13; potential multiple membrane spanning domains	1
ORF_5; potential multiple membrane spanning domains	1
Proline racemase	1
Pseudaminidase	1
Putative acyltransferase	1
Putative chitinase	1
Relaxase	1
Short chain dehydrogenase/reductase family oxidoreductas	1
Similar to DegT/DnrJ/EryC1/StrS family	1
Similar to NeuB family	1
Similar to Polysaccharide biosynthesis protein	1

(putative) uncharacterized or hypothetical protein	36
phage protein	5
Type 4 fimbrial / Pilus biogenesis	4
Integrase/Transposase	3
Hemagglutinin/Adhesin	2
pyoverdine biosynthesis	2
Type I restriction modification system	2
transporter component	1
1,3-propanediol dehydrogenase	1
ChvB	1
Cobyrinic acid a,c-diamide synthase	1
DNA primase-like protein	1
F17 fimbrial protein	1
Fusion protein	1
Hydrolase	1
Hypothetical helix-turn-helix protein	1
Nucleotide sugar transaminase	1
Nucleotide sugar transaminase	1
Patch repair protein	1
Peptide synthase (Fragment)	1
Presumed portal vertex protein	1
Probable sulfatase	1
Probable TonB-dependent receptor	1
Probable transmembrane sensor	1
Putative glycosyl transferase	1
Putative restriction endonuclease	1
Terminase ATPase subunit	1
Tetratricopeptide repeat protein	1
Type II secretion system protein	1
Ultraviolet light resistance protein B, interruption-C	1

(putative) uncharacterized or hypothetical protein	88
phage protein	11
transcriptional regulator	9
Integrase/Transposase	7
Type 4 fimbrial / Pilus biogenesis	3
transporter component	3
Hemagglutinin/Adhesin	2
flagella biosynthesis	2
Type I restriction modification system	2
pyocin	2
pyoverdine biosynthesis	1
LPS/O-antigen biosynthesis	1
1,3-propanediol dehydrogenase	2
Probable glycosyl transferase	3
Adenylyl-sulfate kinase	1
Aromatic-ring hydroxylase	1
Asparagine synthetase	1
COG1196: Chromosome segregation ATPases	1
DNA topoisomerase	1
Esterase/lipase	1
Glycoprotein	1
GTPase	1
Heavy metal translocating P-type ATPase	1
Helicase	1
Helicase/SNF2 family domain-containing protein	1
Membrane fusion protein	1
Methyltransferase protein	1
Phytoene dehydrogenase	1
Polyketide synthase type I	1
Probable FMN oxidoreductase	1
Probable NAD(P)H dehydrogenase	1
Probable transmembrane protein	1
Putative AcrB/AcrD/AcrF family protein	1
Putative dehydrogenase	1
Putative halogenase	1
Putative reverse transcriptase	1
Pyruvate/2-oxoglutarate dehydrogenase complex, dihydrolip1	1
Relaxase	1
Resolvase domain-containing protein	1
Sensor kinase CusS	1
Terminase ATPase subunit	1
Type II secretion system protein	1

(putative) uncharacterized or hypothetical protein 89

phage protein	10
metal resistance	9
Integrase/Transposase	7
transcriptional regulator	5
transporter component	4
Type 4 fimbrial / Pilus biogenesis	2
Hemagglutinin/Adhesin	2
flagella biosynthesis	2
plasmid-related protein	2
pyocin	1
excisionase	2
NADPH-dependent FMN reductase	2
1,3-propanediol dehydrogenase	1
3-oxoacyl-(Acyl-carrier-protein) synthase	1
Acetyltransferase	1
Alcohol dehydrogenase (Zn-dependent)	1
Anthranilate dioxygenase reductase	1
COG0635: Coproporphyrinogen III oxidase and related Fe-1	1
Cold-shock DNA-binding domain protein	1
DEAD/DEAH box helicase	1
DNA primase-like protein	1
Group 1 glycosyl transferase	1
Helicase/SNF2 domain protein	1
Hydrolase	1
Phosphonate dehydrogenase	1
Phytoene dehydrogenase	1
Protease	1
Putative lipoprotein	1
Putative zinc-binding dehydrogenase	1
Site-specific recombinase	1
Type IV secretory pathway protein	1
Xylene monooxygenase electron transfer component	1

(putative) uncharacterized or hypothetical protein	42
Integrase/Transposase	6
Type 4 fimbrial / Pilus biogenesis	4
transcriptional regulator	2
transporter component	2
Type I restriction modification system	2
Type VI secretion system	2
pyocin	2
LPS/O-antigen biosynthesis	2
phage protein	1
flagella biosynthesis	1
plasmid-related protein	1

1,3-propanediol dehydrogenase	1
Aromatic-ring hydroxylase	1
ATP/GTP-binding protein	1
Conjugative transfer ATPase	1
DNA repair protein RadC	1
DNA topoisomerase	1
GCN5-related N-acetyltransferase	1
Integral membrane sensor signal transduction histidine kina1	1
Periplasmic sensor signal transduction histidine kinase	1
Phytoene dehydrogenase	1
Probable type II secretion system protein	1
Putative outer membrane protein CC_0351	1
Relaxase	1
Restriction endonuclease	1

(putative) uncharacterized or hypothetical protein	131
Integrase/Transposase	9
phage protein	9
transcriptional regulator	7
transporter component	2
Hemagglutinin/Adhesin	1
Addiction module toxin, Txe/YoeB family	1
Alcohol dehydrogenase (Zn-dependent)	1
Apolipoprotein N-acyltransferase	1
ATPase AAA	1
ATP-binding protein	1
ATP-dependent Clp protease proteolytic subunit	1
Coenzyme A ligase	1
Conserved hypothetical DNA-binding protein	1
Dioxygenase DitA ferredoxin component	1
Dioxygenase DitA oxygenase component small subunit	1
Dioxygenase large alpha subunit	1
DitK	1
DNA repair protein RadC	1
GCN5-like N-acetyltransferase	1
Glutathione peroxidase	1
GTPase	1
GTPase SAR1 and related small G protein	1
Helicase domain protein	1
Lactoylglutathione lyase and related lyases	1
Non-heme catalase KatN	1
Outer membrane channel protein	1
P450 monooxygenase	1
Phytoene dehydrogenase and related proteins	1
Plasmid like TrbL protein, component of conjugation system	1

Polyketide synthase type I	1
Putative acyl-CoA dehydrogenase	1
Putative acyltransferase	1
Putative DNA helicase	1
Recombination factor protein RarA (Fragment)	1
RepA	1
S-(Hydroxymethyl)glutathione dehydrogenase	1
SprT-like family	1
UvrABC system protein B (Protein uvrB) (Excinuclease ABC1	1

(putative) uncharacterized or hypothetical protein	107
phage protein	17
Type 4 fimbrial / Pilus biogenesis	8
Integrase/Transposase	7
transcriptional regulator	7
transporter component	4
metal resistance	3
LPS/O-antigen biosynthesis	2
AAA ATPase central domain-containing protein	1
A-type flagellin	1
Chitinase domain protein	1
Cytotoxin	1
DEAD/DEAH box helicase	1
DNA adenine methyltransferase	1
DNA topoisomerase	1
Exoenzyme S	1
Glycoprotein	1
Glycoprotein	1
Glycosyl transferase family protein	1
Labile enterotoxin output A	1
Lysozyme	1
Molecular chaperone of HSP90 family	1
Molybdopterin biosynthesis protein MoeB	1
Nucleotide sugar epimerase/dehydratase WbpM	1
Nucleotide sugar transaminase	1
ORF_13; similar to NAD dependent epimerase/dehydratase	1
Phospholipase D domain protein	1
Phosphonate dehydrogenase	1
Phytoene dehydrogenase	1
Probable type II secretion system protein	1
Putative antirepressor	1
Putative DNA helicase	1
Putative DNA methyltransferase	1
Putative DotA	1
Putative group 4 glycosyl transferase	1

Putative lipoprotein	1
Putative metallophosphoesterase	1
Putative nrbE-like protein	1
Putative structural protein	1
Rhs family protein	1
RNA-directed DNA polymerase	1
Short chain dehydrogenase/reductase family oxidoreductas	1
UDP-glucose 4-epimerase	1
UDP-glucose/GDP-mannose dehydrogenase-like protein	1

(putative) uncharacterized or hypothetical protein	57
phage protein	9
Type 4 fimbrial / Pilus biogenesis	5
transporter component	4
transcriptional regulator	4
Integrase/Transposase	2
Type II secretion system	2
LPS/O-antigen biosynthesis	1
flagella biosynthesis	1
Glycoprotein	5
Probable glycosyl transferase	3
Restriction endonuclease	2
Acyltransferase 3	1
Aminoglycoside response regulator	1
ATP-binding protein	1
C-5 cytosine-specific DNA methylase	1
Membrane fusion protein	1
PltZ	1
Polyketide synthase type I	1
Probable alkylhalidase pltM	1
Putative halogenase	1
Putative peptidoglycan-binding domain-containing protein	1
Relaxase	1
Rhs family protein	1
Ultraviolet light resistance protein B, interruption-C	1
UvrD/REP helicase	1

(putative) uncharacterized or hypothetical protein	69
Integrase/Transposase	16
transcriptional regulator	9
phage protein	6
flagella biosynthesis	3

metal resistance	3
Type 4 fimbrial / Pilus biogenesis	2
transporter component	2
Type II secretion system	2
Type I restriction modification system	2
LPS/O-antigen biosynthesis	1
pyoverdine biosynthesis	1
Putative DNA-binding protein	2
Putative halogenase	2
Acyltransferase 3	1
Adhesin	1
Aldehyde dehydrogenase	1
ATP-dependent zinc metalloprotease FtsH	1
Cl repressor protein	1
Cold-shock DNA-binding domain protein	1
DNA methylase	1
DNA-cytosine methyltransferase	1
GTPase	1
Helicase	1
NAD dependent epimerase/dehydratase-like protein	1
PltZ	1
Probable alkylhalidase pltM	1
Probable FMN oxidoreductase	1
Putative phenylpropionate dioxygenase	1
RNA-directed DNA polymerase	1
Sensor kinase CusS	1
Single-stranded DNA-binding protein	1
SNF2 family-related helicase	1
Thioredoxin	1
TniB	1
UDP-glucose/GDP-mannose dehydrogenase-like protein	1
UvrD/REP helicase (Fragment)	1

(putative) uncharacterized or hypothetical protein	88
metal resistance	5
Type 4 fimbrial / Pilus biogenesis	5
Integrase/Transposase	4
transcriptional regulator	3
phage protein	2
flagella biosynthesis	2
transporter component	2
LPS/O-antigen biosynthesis	2
Type I site-specific restriction-modification system protein	1
2-alkenal reductase	1
AAA ATPase central domain-containing protein	1

Acetate kinase	1
Aromatic-ring hydroxylase	1
ATP-dependent Clp protease, ATP-binding subunit ClpC	1
Conjugative transfer ATPase	1
DEAD/DEAH box helicase	1
DNA topoisomerase	1
Exoenzyme S	1
Extracellular solute-binding protein, family 5	1
Ferrichrome-iron receptor	1
Heat shock protein Hsp20	1
Helicase domain protein	1
Hydrolase	1
Non-heme catalase KatN	1
O-methyl transferase family protein	1
Peptidase S8 and S53 subtilisin kexin sedolisin	1
Peptide synthase	1
Phospholipase D domain protein	1
Putative 3-oxoacyl-(Acyl-carrier-protein) synthase III	1
Putative helicase	1
Restriction endonuclease	1
Sensor kinase CusS	1
TPR domain protein	1

Table S3B. Origin species and function predictions for homologues from other spec

Homologues from other *P. aeruginosa* strains are not listed in this table.

Origin species and function prediction were taken from closest homologues found by blastx compa
Homologues without any predicted function were summarized by one entry ("putative/uncharacteri:

source species	count	proteobacteria class	count
strain AA2 (13 protein homolgues)			
<i>Polaromonas sp.</i>	3	Gamma	7
<i>Providencia burhodogranariea</i>	2	Beta	5
<i>Pseudomonas fluorescens</i>	2	Alpha	1
<i>Pseudomonas mendocina</i>	1		
<i>Pseudomonas stutzeri</i>	1		
<i>Pseudomonas syringae</i>	1		
<i>Comamonas testosteroni</i>	1		
<i>Methylosinus trichosporium</i>	1		
<i>Neisseria mucosa</i>	1		
strain HK3 (21 protein homolgues)			
<i>Pseudomonas sp.</i>	4	Gamma	16
<i>Pseudomonas fluorescens</i>	2	Alpha	2
<i>Pseudomonas stutzeri</i>	2	Beta	2
<i>Salmonella enterica subsp. enterica sero2</i>		Delta	1
<i>Achromobacter piechaudii</i>	1		
<i>Actinobacillus pleuropneumoniae serova.1</i>	1		
<i>Desulfovibrio desulfuricans</i>	1		
<i>Methylobacterium alcaliphilum</i>	1		
<i>Oceanicaulis sp.</i>	1		
<i>Pseudomonas pseudoalcaligenes</i>	1		

<i>Pseudomonas putida</i>	1
<i>Pseudomonas savastanoi pv. savastanoi</i>	1
<i>Pseudomonas viridiflava</i>	1
<i>Ralstonia syzygii</i>	1
<i>Rhizobium leguminosarum bv. viciae</i>	1

strain KB1 (13 protein homologues)

<i>Pseudomonas sp.</i>	4	Gamma	12
<i>Pseudomonas fluorescens</i>	2	Beta	1
<i>Pseudomonas mendocina</i>	2		
<i>Pseudomonas fulva</i>	1		
<i>Pseudomonas psychrotolerans</i>	1		
<i>Pseudomonas putida</i>	1		
<i>Pseudomonas stutzeri</i>	1		
<i>Polaromonas sp.</i>	1		

strain KK1 (31 protein homologues)

<i>Pseudomonas sp.</i>	5	Gamma	26
<i>Pseudomonas putida</i>	5	Beta	3
<i>Pseudomonas chlororaphis subsp. aurec3</i>		Alpha	1
<i>Pseudomonas stutzeri</i>	3	Zeta	1
<i>Pseudomonas fluorescens</i>	2		
<i>Pseudomonas brassicacearum</i>	2		
<i>Pseudomonas entomophila</i>	1		
<i>Pseudomonas fulva</i>	1		
<i>Pseudomonas pseudoalcaligenes</i>	1		
<i>Pseudomonas syringae</i>	1		
<i>Ralstonia metallidurans</i>	1		
<i>Stenotrophomonas maltophilia</i>	1		
<i>Acidovorax sp.</i>	1		
<i>Bradyrhizobium sp.</i>	1		
<i>Burkholderia thailandensis</i>	1		

Mariprofundus ferrooxydans 1
Methylococcus capsulatus 1

strain MF1 (25 protein homologues)

<i>Pseudomonas syringae</i>	4	Gamma	19
<i>Pseudomonas sp.</i>	3	Beta	6
<i>Pseudomonas fluorescens</i>	2		
<i>Ralstonia metallidurans</i>	2		
<i>Pseudomonas mendocina</i>	1		
<i>Pseudomonas pseudoalcaligenes</i>	1		
<i>Pseudomonas putida</i>	1		
<i>Aeromonas hydrophila</i>	1		
<i>Alicyclophilus denitrificans</i>	1		
<i>Cardiobacterium hominis</i>	1		
<i>Cupriavidus oxalaticus</i>	1		
<i>Delftia acidovorans</i>	1		
<i>Enterobacter cloacae</i>	1		
<i>Janthinobacterium sp.</i>	1		
<i>Salmonella enterica subsp. enterica sero1</i>	1		
<i>Shewanella denitrificans</i>	1		
<i>Xanthomonas citri pv. mangiferaeindicae</i>	1		
<i>Xanthomonas oryzae pv. oryzae</i>	1		

strain NA1 (21 protein homologues)

<i>Pseudomonas putida</i>	6	Gamma	20
<i>Stenotrophomonas maltophilia</i>	3	Beta	1
<i>Pseudomonas fluorescens</i>	2		
<i>Pseudomonas sp.</i>	2		
<i>Pseudomonas syringae</i>	1		
<i>Pseudomonas fulva</i>	1		
<i>Enterobacter cloacae</i>	1		

<i>Escherichia coli</i>	1
<i>Shewanella baltica</i>	1
<i>Sideroxydans lithotrophicus</i>	1
<i>Xanthomonas albilineans</i>	1
<u><i>Xanthomonas axonopodis pv. citri</i></u>	<u>1</u>

strain NM1 (40 protein homologues)

<i>Pseudomonas stutzeri</i>	12	Gamma	33
<i>Pseudomonas sp.</i>	6	Beta	6
<i>Pseudomonas putida</i>	5	Delta	1
<i>Pseudomonas chlororaphis</i>	3		
<i>Pseudomonas syringae</i>	2		
<i>Burkholderia sp.</i>	2		
<i>Pseudomonas fluorescens</i>	1		
<i>Aromatoleum aromaticum</i>	1		
<i>Bermanella marisrubri</i>	1		
<i>Bordetella petrii</i>	1		
<i>Brenneria sp.</i>	1		
<i>Herminiimonas arsenicoxydans</i>	1		
<i>Methylobacillus flagellatus</i>	1		
<i>Nitrosococcus oceani</i>	1		
<i>Shewanella pealeana</i>	1		
<u><i>Sorangium cellulosum</i></u>	<u>1</u>		

strain RP1 (17 protein homologues)

<i>Pseudomonas putida</i>	4	Gamma	10
<i>Pseudomonas sp.</i>	3	Beta	4
<i>Burkholderia vietnamiensis</i>	2	Delta	2
<i>Desulfovibrio aespoeensis</i>	2	Alpha	1
<i>Pseudomonas synxantha</i>	1		
<i>Pseudomonas syringae</i>	1		

<i>Aeromonas salmonicida</i>	1
<i>Oligotropha carboxidovorans</i>	1
<i>Oxalobacter formigenes</i>	1
<i>Ralstonia metallidurans</i>	1

strain ST1 (7 protein homologues)

<i>Pseudomonas putida</i>	2	Gamma	6
<i>Pseudomonas syringae</i>	2	Beta	1
<i>Pseudomonas stutzeri</i>	1		
<i>Delftia acidovorans</i>	1		
<i>Pseudoalteromonas sp.</i>	1		

strain TR1 (16 protein homologues)

<i>Pseudomonas syringae</i>	4	Gamma	15
<i>Pseudomonas stutzeri</i>	3	Beta	1
<i>Pseudomonas sp.</i>	2		
<i>Providencia burhodogranariea</i>	2		
<i>Pseudomonas fluorescens</i>	1		
<i>Pseudomonas putida</i>	1		
<i>Pseudomonas savastanoi pv. savastanoi</i>	1		
<i>Bordetella petrii</i>	1		
<i>Escherichia coli</i>	1		

strain WU2 (15 protein homologues)

<i>Pseudomonas sp.</i>	4	Gamma	8
<i>Acidovorax sp.</i>	4	Beta	5
<i>Pseudomonas avellanae</i>	1	Alpha	1

<i>Pseudomonas stutzeri</i>	1	Delta	1
<i>Pseudomonas syringae</i>	1		
<i>Achromobacter piechaudii</i>	1		
<i>Anaeromyxobacter sp.</i>	1		
<i>Manganese-oxidizing bacterium</i>	1		
<i>Nitrococcus mobilis</i>	1		

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irisons against bacterial proteins in the UniProt database.
zed/hypothetical protein").

predicted function	count
(putative) uncharacterized or hypothetical protein	9
ISPsy24 transposase	1
Prophage LambdaMc01, SNF2 family helicase	1
Adhesin	1
DNA adenine methylase	1

(putative) uncharacterized or hypothetical protein	11
ABC-type spermidine/putrescine transport system, permease component I	1
Crossover junction endodeoxyribonuclease	1
Cupin 4 family protein	1
Integrase	1
Integrase catalytic region	1
Integrase catalytic region ISDde2	1
MerR family transcriptional regulator	1
Phage replication protein O	1
Putative acyltransferase	1

Transposase IS204/IS1001/IS1096/IS1165 family protein	1
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(putative) uncharacterized or hypothetical protein	8
F17 fimbrial protein	1
Putative restriction endonuclease	1
Tetratricopeptide repeat protein	1
Transposase	1
Type I restriction-modification system, M subunit	1

(putative) uncharacterized or hypothetical protein	18
Esterase/lipase	1
Filamentous hemagglutinin	1
Integrase catalytic region	1
Peptide ABC transporter, periplasmic peptide-binding protein	1
Phage-related regulatory protein cII	1
Prophage MuMc02, F protein	1
Putative dehydrogenase	1
Putative phage tail protein	1
Pyruvate/2-oxoglutarate dehydrogenase complex	1
Site-specific recombinase, phage integrase family	1
Transcriptional regulator	1
Transporter, major facilitator family	1
Transposase	1

(putative) uncharacterized or hypothetical protein	16
Copper resistance D	1
Filamentous hemagglutinin family protein	1
Heavy metal translocating P-type ATPase	1
Helicase/SNF2 domain protein	1
ISXoo6 transposase	1
Mercuric transport protein periplasmic component MerP	1
NADPH-dependent FMN reductase	1
Transposase	1
Xylene monooxygenase electron transfer component	1

(putative) uncharacterized or hypothetical protein	11
Bacteriophage protein	1
Integral membrane sensor signal transduction histidine kinase	1
Integrase family protein	1
Periplasmic sensor signal transduction histidine kinase	1
Putative outer membrane protein CC_0351	1
Regulatory protein	1

Restriction endonuclease	1
Two component transcriptional regulator, winged helix family	1
Type VI secretion protein IcmF	1
Type VI secretion system effector, Hcp1 family	1

(putative) uncharacterized or hypothetical protein	27
Addiction module toxin, Txe/YoeB family	1
Apolipoprotein N-acyltransferase	1
ATPase AAA	1
Helicase domain protein	1
Na(+)/H(+) antiporter NhaA	1
Putative acyltransferase	1
Putative DNA helicase	1
Putative regulatory protein	1
Recombination factor protein RarA (Fragment)	1
Sigma-54 dependent transcriptional regulator	1
SprT-like family	1
Transposase is3 is911 family protein	1
UvrABC system protein B (Protein uvrB) (Excinuclease ABC subunit B)	1

(putative) uncharacterized or hypothetical protein	11
Labile enterotoxin output A	1
Lysozyme	1
Molecular chaperone of HSP90 family	1
Putative DNA methyltransferase	1
Putative lipoprotein	1

Putative transcriptional regulator 1

(putative) uncharacterized or hypothetical protein 3

ISPsy24, transposase OrfA 1

Phage terminase, large subunit, PBSX family 1

Phage-like protein 1

Restriction endonuclease 1

(putative) uncharacterized or hypothetical protein 6

Adhesin 1

DNA-cytosine methyltransferase 1

Phage integrase family protein 1

Putative DNA-binding protein 1

Putative transposase 1

Thioredoxin 1

Transcriptional regulator 1

Transcriptional regulator, GntR family 1

UvrD/REP helicase (Fragment) 1

XRE family transcriptional regulator 1

(putative) uncharacterized or hypothetical protein 10

Abortive infection bacteriophage resistance protein 1

Helicase domain protein 1

Helix-turn-helix protein	1
Phage integrase family protein	1
TPR domain protein	1