Supplementary Table S1. Identified proteins for *Pseudomonas sp. C9*.

Upregulated proteins			**Downregulated proteins**			**Proteins only in IPR treatment**		
Accession	**Protein name**	**FC**	**Accession**	**Protein name**	**FC**	**Accession**	**Protein name**	**FC**
A0A5C5N9R8	Catalase	8.6	A0A5C5NZ64	Maleylacetoacetate isomerase	-2.0	A0A5C5NUQ3	Maltose alpha-D-glucosyltransferase	U
A0A5C5NYY2	Peptidoglycan-binding protein LysM	7.2	A0A5C5NHU5	DUF4426 domain-containing protein	-1.8	A0A5C5NC19	DNA ligase D	U
A0A5C5NZ78	Guanylate kinase	5.6	A0A5C5NFE0	Cold-shock protein	-1.7	A0A5C5NZM0	Dimethylglycine demethylation protein DgcA	U
A0A5C5NIP7	Catalase HPII	5.5	A0A5C5NGA5	Class II aldolase/adducin family protein	-1.7	A0A5C5NGL5	Transketolase	U

A0A5C5NJ26	Type 1 glutamine amidotransferase	5.3	A0A5C5NGL0	Re/Si-specific NAD(P)(+) transhydrogenase subunit alpha	-1.7	A0A5C5NG27	BON domain-containing protein	U
A0A5C5P0X8	Acetyl-CoA carboxylase biotin carboxyl carrier protein	5.0	A0A5C5NZ71	PasA protein	-1.7	A0A5C5NQD8	Ubiquinone-dependent pyruvate dehydrogenase	U
A0A5C5NZ12	30S ribosomal protein S6	4.6	A0A5C5P1H8	Enoyl-CoA hydratase/isomerase family protein	-1.5	A0A5C5NXB6	DEAD/DEAH box helicase	U
A0A5C5NV16	Electron transfer flavoprotein subunit beta/FixA family protein	4.5	A0A5C5NYT5	Leucyl aminopeptidase	-1.5	A0A5C5NN96	PQQ-dependent dehydrogenase. methanol/ethanol family	U

A0A5C5NXV6	Grx4 family monothiol glutaredoxin	4.5	A0A5C5NB23	Cation acetate symporter	-1.5	A0A5C5NT29	N-acetylglutaminylglutamine amidotransferase	U
A0A5C5NT48	OsmC family protein	4.3	A0A5C5NMT5	Cobalamin biosynthesis protein CobW	-1.5	A0A5C5NA49	Lactonase family protein	U
A0A5C5NZ11	Adenosylhomocysteinase	4.2	A0A5C5NM57	5-(Carboxyamino)imidazole ribonucleotide mutase	-1.5	A0A5C5NKS1	DUF4142 domain-containing protein	U
A0A5C5NV61	Efflux RND transporter periplasmic adaptor subunit	4.1	A0A5C5NJH9	SPFH/Band 7/PHB domain protein	-1.5	A0A5C5NRX3	DUF3416 domain-containing protein	U

A0A5C5NX16	HAD family hydrolase	3.7	A0A5C5NKL9	Aminodeoxychorismate/anthranilate synthase component II	-1.5	A0A5C5P0U2	Bacterioferritin	U
A0A5C5NP21	Elongation factor P	3.5	A0A5C5P0E9	30S ribosome-binding factor RbfA	-1.5	A0A5C5NV70	Dihydroorotase	U
A0A5C5NPV2	Dipeptidase	3.4	A0A5C5NZ14	Polyphosphate kinase 1	-1.5	A0A5C5NK38	3-isopropylmalate dehydratase large subunit	U
A0A5C5NS15	YajQ family cyclic di-GMP-binding protein	3.4	A0A5C5NWC9	Amidotransferase	-1.4	A0A5C5NLU4	PAS domain-containing protein	U
A0A5C5N9B2	30S ribosomal protein S4	3.4	A0A5C5NH08	Metal-binding protein	-1.4	A0A5C5NZY1	Nucleoid-associated protein YejK	U
A0A5C5N9B3	50S ribosomal protein L3	3.4	A0A5C5NW54	Uncharacterized protein	-1.4	A0A5C5NIK5	Pilus assembly protein PilZ	U

A0A5C5P048	Imidazoleglycerol-phosphate dehydratase HisB	3.3	A0A5C5NDP5	2-hydroxy-3-oxopropionate reductase	-1.4	A0A5C5NJ53	Hemerythrin domain-containing protein	U
A0A5C5NH99	Sigma-54-dependent Fis family transcriptional regulator	3.3	A0A5C5NAX5	23S rRNA (Uridine(2552)-2'-O)-methyltransferase RlmE	-1.4	A0A5C5NEL0	Xanthine dehydrogenase family protein subunit M	U
A0A5C5N7Y6	Carboxymuconolactone decarboxylase family protein	3.2	A0A5C5NX61	Fumarate/nitrate reduction transcriptional regulator Fnr	-1.4	A0A5C5NVH8	NAD-dependent DNA ligase LigA	U
A0A5C5NE62	Inorganic diphosphatase	3.2	A0A5C5NNN9	Porin	-1.4	A0A5C5NRK9	Methionine synthase	U
A0A5C5N9G8	50S ribosomal protein L10	3.2	A0A5C5NUS8	Glutathione S-transferase family protein	-1.4	A0A5C5NDB3	50S ribosomal protein L18	U

A0A5C5NTC8	Co-chaperone GroES	3.2	A0A5C5NK22	FAD-binding oxidoreductase	-1.4	A0A5C5NAT1	YeaH/YhbH family protein	U
A0A5C5NEL4	Glycine-betaine demethylase subunit GbcA	3.2	A0A5C5NX15	Cytochrome-c oxidase. cbb3-type subunit III	-1.4	A0A5C5NX66	DUF4197 domain-containing protein	U
A0A5C5NEZ3	F0F1 ATP synthase subunit epsilon	3.1	A0A5C5NTK5	Methyl-accepting chemotaxis protein	-1.4	A0A5C5NUW8	Putative 4-hydroxy-4-methyl-2-oxoglutarate aldolase	U
A0A5C5NES7	Isocitrate lyase	3.0	A0A5C5NTF7	Type VI secretion system membrane subunit TssM	-1.4	A0A5C5NB29	50S ribosomal protein L23	U
A0A5C5NT66	Holliday junction branch migration protein RuvA	2.9	A0A5C5NH68	Molecular chaperone SurA	-1.4	A0A5C5NZC4	S41 family peptidase	U

A0A5C5NFJ4	NADP-dependent isocitrate dehydrogenase	2.9	A0A5C5NP46	UDP-N-acetylmuramate:L-alanyl-gamma-D-glutamyl-meso-diaminopimelate ligase	-1.3	A0A5C5NAL1	LPS-assembly protein LptD	U
A0A5C5NS20	30S ribosomal protein S16	2.8	A0A5C5NTS7	Ribonuclease T	-1.3	A0A5C5NG75	Glutamine-hydrolyzing carbamoyl-phosphate synthase small subunit	U
A0A5C5NVJ0	DUF4398 domain-containing protein	2.8	A0A5C5NFA5	Aldo/keto reductase	-1.3	A0A5C5NX70	Type VI secretion system-associated FHA domain protein TagH	U
A0A5C5N9A0	50S ribosomal protein L14	2.8	A0A5C5NTU7	Thioredoxin-disulfide reductase	-1.3	A0A5C5P0S0	Oxidative damage protection protein	U

A0A5C5NBH4	50S ribosomal protein L25/general stress protein Ctc	2.7	A0A5C5NXR3	Beta-glucosidase BglX	-1.3	A0A5C5NH25	OsmC family protein	U
A0A5C5N9C9	30S ribosomal protein S17	2.7	A0A5C5NFY3	EAL domain-containing protein	-1.3	A0A5C5NX09	DUF4399 domain-containing protein	U
A0A5C5NHV0	Molecular chaperone DnaK	2.7	A0A5C5NCQ1	Excinuclease ABC subunit B	-1.3	A0A5C5NXH7	Amino acid ABC transporter ATP-binding protein	U
A0A5C5N857	Peptidase M4 family protein	2.7	A0A5C5NSZ0	N-acetylmuramic acid 6-phosphate phosphatase MupP	-1.3	A0A5C5N9W5	Uncharacterized protein	U
A0A5C5N900	Glycogen debranching protein GlgX	2.7	A0A5C5NXV3	Nucleotide sugar dehydrogenase	-1.3	A0A5C5NXN6	Cytochrome c oxidase accessory protein CcoG	U

A0A5C5N979	Malto-oligosyltrehalose trehalohydrolase	2.6	A0A5C5NWP8	GNAT family N-acetyltransferase	-1.3	A0A5C5ND72	Peptide chain release factor 1	U
A0A5C5NJE0	Transaldolase	2.6	A0A5C5NQF8	Zn-dependent hydrolase	-1.3	A0A5C5NQ36	TonB-dependent siderophore receptor	U
A0A5C5NRW8	LTXXQ domain protein	2.6	A0A5C5NR82	tRNA uridine-5-carboxymethylaminomethyl(34) synthesis enzyme MnmG	-1.3	A0A5C5P187	Glucose-1-phosphate thymidylyltransferase RfbA	U
A0A5C5NIA3	Peptidylprolyl isomerase	2.6	A0A5C5NRV7	D-amino acid dehydrogenase	-1.3	A0A5C5NPS9	Aminopeptidase P family protein	U
A0A5C5NCX7	Formaldehyde dehydrogenase. glutathione-independent	2.6	A0A5C5NNK3	Class II poly(R)-hydroxyalkanoic acid synthase	-1.3	A0A5C5NFW9	RNA polymerase-binding protein DksA	U

A0A5C5N7S3	Cupin domain-containing protein	2.6	A0A5C5NTM9	Alpha-2-macroglobulin family protein	-1.3	A0A5C5NY47	Cytochrome c5 family protein	U
A0A5C5NB69	F0F1 ATP synthase subunit B	2.6	A0A5C5NLU1	Glycine zipper 2TM domain-containing protein	-1.2	A0A5C5NQU7	DUF883 family protein	U
A0A5C5P119	Branched-chain amino acid ABC transporter substrate-binding protein	2.6	A0A5C5NH92	3-hydroxybutyrate dehydrogenase	-1.2	A0A5C5NCM6	30S ribosomal protein S21	U
A0A5C5NQ11	Type 1 glutamine amidotransferase domain-containing protein	2.6	A0A5C5NUW1	PhzF family phenazine biosynthesis protein	-1.2	A0A5C5NS27	Uncharacterized protein	U
A0A5C5NJ96	30S ribosomal protein S1	2.5	A0A5C5NXG2	Universal stress protein	-1.2	A0A5C5NSA2	D-glycerate dehydrogenase	U

A0A5C5NXY0	Asparaginase	2.5	A0A5C5NF46	YecA family protein	-1.2	A0A5C5NJC1	Class I SAM-dependent methyltransferase	U
A0A5C5N9D7	Single-stranded DNA-binding protein	2.5				A0A5C5N823	DUF4174 domain-containing protein	U
A0A5C5NS74	IMP dehydrogenase	2.5				A0A5C5N9F1	Bacterioferritin	U
A0A5C5NN59	Peptidylprolyl isomerase	2.5				A0A5C5P107	3-dehydroquinate synthase	U
A0A5C5NVS8	NUDIX domain-containing protein	2.5				A0A5C5NE32	Ku protein	U
A0A5C5NMX8	Phosphoheptose isomerase	2.4				A0A5C5NS30	FKBP-type peptidyl-prolyl cis-trans isomerase	U
A0A5C5NY40	Membrane dipeptidase	2.4				A0A5C5NIR5	Uncharacterized protein	U

A0A5C5NDD2	Carbon-nitrogen hydrolase family protein	2.4
A0A5C5NZG7	Bifunctional phosphoribosylaminoimidazolecarboxamide formyltransferase/IMP cyclohydrolase	2.4
A0A5C5NA52	PQQ-dependent sugar dehydrogenase	2.4
A0A5C5NN47	YebC/PmpR family DNA-binding transcriptional regulator	2.4

A0A5C5NL18	Tryptophan synthase subunit beta	U
A0A5C5N928	Glycogen synthase GlgA	U
A0A5C5NX99	MinD/ParA family protein	U
A0A5C5NS47	Glutamate 5-kinase	U

A0A5C5NRJ5	Preprotein translocase subunit SecA	2.3
A0A5C5NDS2	MaoC family dehydratase	2.3
A0A5C5NIY0	Universal stress protein UspA	2.3
A0A5C5NMY4	Ribosome-associated translation inhibitor RaiA	2.3
A0A5C5NV71	Transcriptional regulator	2.3
A0A5C5NTE8	50S ribosomal protein L19	2.3

A0A5C5NHX2	ATP-binding cassette domain-containing protein	U
A0A5C5NLZ8	Circadian clock protein KaiC	U
A0A5C5NS99	Fe-S protein assembly chaperone HscA	U
A0A5C5NVQ4	RNA polymerase sigma factor RpoS	U
A0A5C5NHB0	Transcription elongation factor GreA	U
A0A5C5NJF5	Uncharacterized protein	U

A0A5C5NT33	Amidohydrolase	2.2
A0A5C5NYI1	Class 1 fructose-bisphosphatase	2.2
A0A5C5NPI9	Tail-specific protease	2.2
A0A5C5NPS3	UDP-N-acetylmuramoyl-L-alanyl-D-glutamate--2.6-diaminopimelate ligase	2.2
A0A5C5NXN5	Phosphoglycerate kinase	2.2
A0A5C5NDC2	30S ribosomal protein S3	2.2

A0A5C5NQ34	Cytochrome c-550 PedF	U
A0A5C5NRR5	Bifunctional protein-disulfide isomerase/oxidoreductase DsbC	U
A0A5C5NZF5	Pilin assembly protein	U
A0A5C5NUD3	Glycine zipper 2TM domain-containing protein	U
A0A5C5NNT3	Lipopolysaccharide transport periplasmic protein LptA	U
A0A5C5NN67	DUF1043 family protein	U

A0A5C5NYN4	Type VI secretion system tube protein Hcp	2.2
A0A5C5N9C1	30S ribosomal protein S8	2.1
A0A5C5NY02	Electron transfer flavoprotein-ubiquinone oxidoreductase	2.1
A0A5C5NAY0	Indole-3-glycerol phosphate synthase TrpC	2.1
A0A5C5NVU2	Formyltetrahydrofolate deformylase	2.1
A0A5C5NUQ4	Peroxiredoxin	2.1

A0A5C5NIY7	Uncharacterized protein	U
A0A5C5NBY8	CBS domain-containing protein	U
A0A5C5NX26	Transcriptional regulator	U
A0A5C5NX85	YicC family protein	U
A0A5C5NXG3	Type VI secretion system protein TssA	U
A0A5C5NWH4	Response regulator transcription factor	U

A0A5C5NK80	Uncharacterized protein	2.1
A0A5C5P055	2.3-bisphosphoglycerate-independent phosphoglycerate mutase	2.1
A0A5C5NES3	Topoisomerase II	2.1
A0A5C5P081	TldD/PmbA family protein	2.0
A0A5C5NH60	30S ribosomal protein S15	2.0
A0A5C5NUE5	Helix-turn-helix domain-containing protein	2.0

A0A5C5NKU1	Nitrate reductase subunit alpha	U
A0A5C5NUW6	N-acetylglutaminylglutamine synthetase	U
A0A5C5NGU1	DUF945 domain-containing protein	U
A0A5C5NK90	LacI family DNA-binding transcriptional regulator	U
A0A5C5NM82	Maltose alpha-D-glucosyltransferase	U
A0A5C5NH50	Shikimate dehydrogenase	U

A0A5C5NDI6	Glycine-betaine demethylase subunit GbcB	2.0
A0A5C5NM45	Peroxiredoxin	2.0
A0A5C5NND7	Outer membrane protein assembly factor BamD	2.0
A0A5C5NXD6	Fructose-bisphosphate aldolase class II	2.0
A0A5C5NKA0	Translation initiation factor IF-3	2.0
A0A5C5N9B8	50S ribosomal protein L15	1.9

A0A5C5NCV3	tRNA (Uridine(54)-C5)-methyltransferase TrmA	U
A0A5C5NF35	OprD family porin	U
A0A5C5NMX4	Metalloprotease TldD	U
A0A5C5NA85	Helix-turn-helix transcriptional regulator	U
A0A5C5NXC3	Acetyl-CoA hydrolase/transferase family protein	U
A0A5C5NMX9	Response regulator	U

A0A5C5NXN7	FAD-binding oxidoreductase	1.9
A0A5C5NX05	HU family DNA-binding protein	1.9
A0A5C5NNU9	Alpha-D-glucose phosphate-specific phosphoglucomutase	1.9
A0A5C5NB10	30S ribosomal protein S13	1.9
A0A5C5N9E9	50S ribosomal protein L11	1.9

A0A5C5NZD7	Rsd/AlgQ family anti-sigma factor	U
A0A5C5NUI1	M48 family metallopeptidase	U
A0A5C5NLB1	Aldo/keto reductase	U
A0A5C5NT37	Ankyrin repeat domain-containing protein	U
A0A5C5NYX5	ATP-binding cassette domain-containing protein	U

A0A5C5N8Y8	Peptide-methionine (R)-S-oxide reductase MsrB	1.9
A0A5C5NIE2	DUF1161 domain-containing protein	1.9
A0A5C5NB64	DNA-directed RNA polymerase subunit alpha	1.9
A0A5C5NHA7	Acetyl-CoA hydrolase/transferase family protein	1.9
A0A5C5NT78	DUF853 family protein	1.9
A0A5C5P108	Ribonuclease R	1.9

A0A5C5N9V4	ABC transporter substrate-binding protein	U
A0A5C5NXN3	DUF4398 domain-containing protein	U
I1SXX4	Major outer membrane lipoprotein I (Fragment)	U
A0A5C5NH51	DUF883 domain-containing protein	U
A0A5C5NVI5	CsbD family protein	U
A0A5C5P1I9	Uncharacterized protein	U

A0A5C5NYU7	Outer membrane protein assembly factor BamC	1.9
A0A5C5NM09	GNAT family N-acetyltransferase	1.9
A0A5C5N9G1	50S ribosomal protein L4	1.8
A0A5C5NM26	Oxaloacetate decarboxylase	1.8
A0A5C5NBG8	Acyloxyacyl hydrolase	1.8
A0A5C5NRM8	Nitroreductase	1.8
A0A5C5NDB7	PhoX family phosphatase	1.8
A0A5C5NJN7	DUF4404 family protein	1.8

A0A5C5P1N4	Serine kinase/phosphatase	U
A0A5C5NS24	Ubiquinol oxidase subunit II	U
A0A5C5NFW0	Uncharacterized protein	U
A0A5C5NEM3	Sarcosine oxidase subunit gamma family protein	U
A0A5C5NF83	Termination factor Rho	U
A0A5C5NT44	DUF5064 family protein	U
A0A5C5NAW3	GTP cyclohydrolase II	U
A0A5C5NT52	Hotdog fold thioesterase	U

A0A5C5NGK2	Transcription termination/antitermination protein NusA	1.8
A0A5C5NPA5	D-alanine--D-alanine ligase	1.8
A0A5C5N9H3	Elongation factor Tu	1.8
A0A5C5NS52	2-isopropylmalate synthase	1.7
A0A5C5NKQ1	Molybdenum cofactor biosynthesis protein B	1.7
A0A5C5NPZ0	Extracellular solute-binding protein	1.7

A0A5C5NDB4	ATP-dependent protease	U
A0A5C5NZ30	Protein-export chaperone SecB	U
A0A5C5NGU5	(2Fe-2S)-binding protein	U
A0A5C5P285	Response regulator	U
A0A5C5NFX3	Ribosome assembly RNA-binding protein YhbY	U
A0A5C5NX13	DUF1508 domain-containing protein	U

A0A5C5NRQ9	FKBP-type peptidyl-prolyl cis-trans isomerase	1.7
A0A5C5NT19	1.4-alpha-glucan branching protein GlgB	1.7
A0A5C5NV21	Pyrimidine/purine nucleoside phosphorylase	1.7
A0A5C5NV30	3-oxoadipate enol-lactonase	1.7
A0A5C5NS02	YebC/PmpR family DNA-binding transcriptional regulator	1.6
A0A5C5N989	Preprotein translocase subunit SecY	1.6

A0A5C5NQC9	Hydroxyacylglutathione hydrolase	U
A0A5C5NVI2	HAD-IA family hydrolase	U
A0A5C5NFK4	DUF4347 domain-containing protein	U
A0A5C5NCI1	Acyl-CoA thioesterase II	U
A0A5C5N907	DUF411 domain-containing protein	U
A0A5C5NJR6	Chemotaxis protein CheA	U

A0A5C5NFF6	ABC transporter substrate-binding protein	1.6
A0A5C5P1E3	DNA-directed RNA polymerase subunit omega	1.6
A0A5C5NU34	Histidine--tRNA ligase	1.6
A0A5C5NP41	Succinate dehydrogenase. cytochrome b556 subunit	1.6
A0A5C5NJ29	LOG family protein	1.6
A0A5C5N9T9	50S ribosomal protein L16	1.6

A0A5C5NPX0	RNA polymerase factor sigma-54	U
A0A5C5NDI9	HlyC/CorC family transporter	U
A0A5C5NQW3	Sugar kinase	U
A0A5C5NTK9	Agmatinase	U
A0A5C5NH77	Curli production assembly protein CsgG	U
A0A5C5NVL1	ATPase	U

A0A5C5NDA4	50S ribosomal protein L17	1.5
A0A5C5NRG4	Quinolinate synthase NadA	1.5
A0A5C5NQM6	SDR family oxidoreductase	1.5
A0A5C5NVG0	Molybdopterin-synthase adenylyltransferase MoeB	1.5
A0A5C5NWB6	Type I methionyl aminopeptidase	1.5

A0A5C5NXK0	Acetylornithine deacetylase	U
A0A5C5NZC6	Acetyl-CoA C-acetyltransferase	U
A0A5C5NZN4	23S rRNA (Adenine(2030)-N(6))-methyltransferase RlmJ	U
A0A5C5NXV5	2-methylaconitate cis-trans isomerase PrpF	U
A0A5C5NLH7	FimV family protein	U

A0A5C5NYN0	Acetyl-CoA carboxylase biotin carboxylase subunit	1.5
A0A5C5NPR2	Cell division protein FtsZ	1.5
A0A5C5NQR7	Nitrite/sulfite reductase	1.5
A0A5C5N9C8	30S ribosomal protein S11	1.5
A0A5C5NWE8	Valine--tRNA ligase	1.5
A0A5C5NN86	Type III PLP-dependent enzyme	1.5

A0A5C5NTJ1	Sorbosone dehydrogenase family protein	U
A0A5C5N934	Cysteine hydrolase	U
A0A5C5N819	Gamma-glutamyltransferase	U
A0A5C5NSV1	TonB-dependent hemoglobin/transferrin/lactoferrin family receptor	U
A0A5C5NJ90	CbbQ/NirQ/NorQ/GpvN family protein	U
A0A5C5NAP9	Acyl-CoA dehydrogenase	U

A0A5C5NLW1	Enoyl-CoA hydratase	1.5
A0A5C5NW36	Uncharacterized protein	1.5
A0A5C5N986	Outer membrane protein OmpW	1.5
A0A5C5NDD3	30S ribosomal protein S7	1.5
A0A5C5NK53	Molecular chaperone DnaJ	1.4

A0A5C5NRV3	LPS export ABC transporter ATP-binding protein	U
A0A5C5NU60	GAF domain-containing protein	U
A0A5C5NTV8	Kinase/pyrophosphorylase	U
A0A5C5N9P7	XRE family transcriptional regulator	U
A0A5C5NDW9	Outer membrane lipoprotein chaperone LolA	U

A0A5C5NB91	Membrane protein insertase YidC	1.4
A0A5C5NT26	ADP-forming succinate--CoA ligase subunit beta	1.4
A0A5C5NRY6	Bifunctional glutamate N-acetyltransferase/amino-acid acetyltransferase ArgJ	1.4
A0A5C5NVJ8	OmpA family protein	1.4
A0A5C5NWZ0	Branched-chain amino acid ABC transporter substrate-binding protein	1.4

A0A5C5NL33	NADPH-dependent 2.4-dienoyl-CoA reductase	U
A0A5C5NR65	C-type cytochrome	U
A0A5C5NTQ5	Uncharacterized protein	U
A0A5C5NYS5	Mechanosensitive channel MscK	U
A0A5C5NQP7	3D-(3.5/4)-trihydroxycyclohexane-	U

A0A5C5NTX3	Chaperonin GroEL	1.4
A0A5C5NNY4	HTH-type transcriptional regulator CysB	1.4
A0A5C5NG01	Polynucleotide adenylyltransferase PcnB	1.4
A0A5C5NDD1	Acyl-CoA dehydrogenase	1.4
A0A5C5P422	Dihydrolipoyllysine-residue acetyltransferase	1.4

	1.2-dione acylhydrolase (Decyclizing)	
A0A5C5NP14	C-type cytochrome biogenesis protein CcmI	U
A0A5C5NJX3	Creatininase family protein	U
A0A5C5P0K4	Glucans biosynthesis glucosyltransferase MdoH	U
A0A5C5NDR1	Ethanolamine ammonia-lyase subunit EutC	U
A0A5C5NFG5	3-deoxy-manno-octulosonate cytidylyltransferase	U

A0A5C5N9R9	CoA transferase subunit A	1.3
A0A5C5NVW3	YbaB/EbfC family nucleoid-associated protein	1.3
A0A5C5NTU5	Threonylcarbamoyl-AMP synthase	1.3
A0A5C5NXQ3	NADP-dependent oxidoreductase	1.3
A0A5C5NZG5	Peptide chain release factor 2	1.3
A0A5C5NG00	Acetolactate synthase small subunit	1.3

A0A5C5NRP3	EAL domain-containing protein	U
A0A5C5NR73	DNA topoisomerase IB	U
A0A5C5NK14	PAS domain S-box protein	U
A0A5C5NSD5	Methyl-accepting chemotaxis protein	U
A0A5C5N8X5	DUF2934 domain-containing protein	U
A0A5C5NQN5	DUF3203 family protein	U

A0A5C5NC72	DUF1993 domain-containing protein	1.3
A0A5C5NYV6	RNA polymerase sigma factor RpoE	1.3
A0A5C5NCV9	F0F1 ATP synthase subunit beta	1.3
A0A5C5N9D2	30S ribosomal protein S19	1.3
A0A5C5NZL9	YceI family protein	1.3
A0A5C5NS58	23S rRNA (Adenine(2503)-C(2))-methyltransferase RlmN	1.3

A0A5C5NP15	Uncharacterized protein	U
A0A5C5NP49	DUF883 domain-containing protein	U
A0A5C5N9D9	30S ribosomal protein S14	U
A0A5C5NUB9	DUF2789 domain-containing protein	U
A0A5C5NBS7	Uncharacterized protein	U
A0A5C5NKM8	Uncharacterized protein	U

A0A5C5NDP1	Pyrroloquinoline-quinone synthase PqqC	1.3
A0A5C5NWQ9	Phosphate ABC transporter ATP-binding protein	1.3
A0A5C5NKZ6	Trigger factor	1.3
A0A5C5NHN5	YciK family oxidoreductase	1.3
A0A5C5NC34	Cytosine deaminase	1.3

A0A5C5NXZ2	Uncharacterized protein	U
A0A5C5N9F8	50S ribosomal protein L30	U
A0A5C5NRJ4	Peptidase M4	U
A0A5C5N839	Vanillate O-demethylase oxidoreductase VanB	U
A0A5C5NXC5	DUF1090 domain-containing protein	U
A0A5C5N7Z9	RcnB family protein	U

		A0A5C5NZL8	Zinc-binding alcohol dehydrogenase family protein	U
		A0A5C5NMZ4	Stringent starvation protein A	U
		A0A5C5NHG8	Preprotein translocase subunit SecG	U
		A0A5C5NX28	Phosphate ABC transporter permease PstA	U
		A0A5C5NXF8	Penicillin-binding protein activator LpoB	U
		A0A5C5NTC5	Response regulator	U

			A0A5C5NVV3	Uncharacterized protein	U
			A0A5C5NLV2	Carbon storage regulator CsrA	U
			A0A5C5NTX1	Protein TolR	U
			A0A5C5NH80	Uncharacterized protein	U
			A0A5C5N951	Endonuclease/exonuclease/phosphatase family protein	U
			A0A5C5NFD2	Arc family DNA-binding protein	U
			A0A5C5NUJ3	Glutathione peroxidase	U

				A0A5C5ND27	GNAT family N-acetyltransferase	U
				A0A5C5NGV8	Large-conductance mechanosensitive channel protein MscL	U
				A0A5C5N8C5	Uncharacterized protein	U
				A0A5C5NWW8	AdeC/AdeK/OprM family multidrug efflux complex outer membrane factor	U
				A0A5C5NW10	DUF3509 domain-containing protein	U
				A0A5C5NUD0	RNA polymerase sigma factor FliA	U

A0A5C5NDQ5	DNA-3-methyladenine glycosylase	U
A0A5C5NZP5	Phosphate starvation-inducible protein PsiF	U
A0A5C5NTB9	50S ribosomal protein L21	U
A0A5C5NWX9	DUF3617 domain-containing protein	U
A0A5C5NDF4	Neutral zinc metallopeptidase	U
A0A5C5N800	Uncharacterized protein	U
A0A5C5NVC5	Cell division protein ZipA	U

			A0A5C5NC51	DUF480 domain-containing protein	U
			A0A5C5NGU6	ATP-dependent RNA helicase RhlB	U
			A0A5C5N7K8	Ribonucleotide-diphosphate reductase subunit beta (Fragment)	U
			A0A5C5NR80	Arsenate reductase ArsC	U
			A0A5C5NZJ2	GNAT family N-acetyltransferase	U
			A0A5C5NCZ0	DNA repair protein RadA	U

		A0A5C5NPU3	Cell division protein ZapE	U
		A0A5C5NV97	Pyridoxamine 5'-phosphate oxidase	U
		A0A5C5NNQ2	BON domain-containing protein	U
		A0A5C5ND60	PilZ domain-containing protein	U
		A0A5C5NGI9	Amino acid deaminase	U
		A0A5C5NAT5	Co2+/Mg2+ efflux protein ApaG	U
		A0A5C5NNP1	Integrase	U

		A0A5C5NKP3	Nitrate reductase subunit beta	U
		A0A5C5NQZ4	N-acetyltransferase	U
		A0A5C5NR39	UPF0149 family protein	U
		A0A5C5NK57	Uncharacterized protein	U
		A0A5C5NN58	Cytochrome bc complex cytochrome b subunit	U
		A0A5C5P198	RNA chaperone Hfq	U
		A0A5C5NDR5	Glucose 1-dehydrogenase	U
		A0A5C5NNS9	Response regulator	U

			A0A5C5NQN9	GAF domain-containing protein	U
			A0A5C5NWS3	Enoyl-CoA hydratase/isomerase family protein	U
			A0A5C5NTJ8	Mechanosensitive ion channel	U
			A0A5C5NFU5	Tetratricopeptide repeat protein	U
			A0A5C5NEQ5	Thiosulfate sulfurtransferase GlpE	U

A0A5C5NST5	Fe-S biogenesis protein NfuA	U
A0A5C5NZ17	ParA family protein	U
A0A5C5NUT8	Recombination protein RecR	U
A0A5C5NGL2	Excinuclease ABC subunit A	U
A0A5C5NJ58	Uncharacterized protein	U
A0A5C5N9M1	(2E.6E)-farnesyl diphosphate synthase	U
A0A5C5P2C7	Acyl-CoA thioesterase	U

			A0A5C5NE53	tRNA (N6-isopentenyl adenosine(37)-C2)-methylthiotransferase MiaB	U
			A0A5C5NU51	Preprotein translocase subunit YajC	U
			A0A5C5N7L2	DUF86 domain-containing protein	U
			A0A5C5NRE7	Thiamine pyrophosphate-dependent dehydrogenase E1 component subunit alpha	U

			A0A5C5NQL6	MurR/RpiR family transcriptional regulator	U
			A0A5C5NVE3	ATP-dependent RNA helicase HrpA	U
			A0A5C5NVX7	Biliverdin-producing heme oxygenase	U
			A0A5C5NVP6	3-hydroxyacyl-CoA dehydrogenase	U
			A0A5C5NZ90	AMIN domain-containing protein	U
			A0A5C5NWM5	Accessory factor UbiK family protein	U

		A0A5C5NA03	Nuclear transport factor 2 family protein	U
		A0A5C5NW14	PadR family transcriptional regulator	U
		A0A5C5NAC8	Helix-turn-helix transcriptional regulator	U
		A0A5C5NFV7	Glutathione S-transferase family protein	U
		A0A5C5NNY0	ABC transporter ATP-binding protein/permease	U
		A0A5C5NVW6	Tripartite tricarboxylate transporter substrate binding protein	U

			A0A5C5NEE3	Protein-glutamate O-methyltransferase CheR	U
			A0A5C5P3G5	Serine acetyltransferase	U
			A0A5C5NMV1	Outer membrane lipid asymmetry maintenance protein MlaD	U
			A0A5C5NYP4	Serine/threonine-protein phosphatase	U
			A0A5C5NUC0	Lipid kinase YegS	U
			A0A5C5NSK5	M23 family metallopeptidase	U

			A0A5C5P1V9	DUF3298 domain-containing protein	U
			A0A5C5NRJ9	Methyl-accepting chemotaxis protein	U
			A0A5C5NZX1	Amino acid ABC transporter substrate-binding protein	U
			A0A5C5NDY0	Uroporphyrinogen-III C-methyltransferase	U
			A0A5C5NVF1	Methyl-accepting chemotaxis protein	U
			A0A5C5NEM2	Uncharacterized protein	U

A0A5C5NFX5	50S ribosomal protein L32	U
A0A5C5NBD6	Peptidylprolyl isomerase	U
A0A5C5NUQ9	DUF2892 domain-containing protein	U
A0A5C5NS94	PepSY domain-containing protein	U
A0A5C5NSV8	Uncharacterized protein	U
A0A5C5NQN8	SRPBCC family protein	U
A0A5C5NUX6	2-methylcitrate dehydratase	U
A0A5C5P178	Esterase	U

				A0A5C5NI36	Translation initiation factor IF-1	U
				A0A5C5NZD0	TIGR02647 family protein	U
				A0A5C5P116	3-oxoacyl-ACP reductase FabG	U
				A0A5C5NRX8	Glycine cleavage system protein GcvH	U
				A0A5C5NTB2	Uncharacterized protein	U
				A0A5C5NW75	OmpA family protein	U
				A0A5C5NNW4	Alpha/beta hydrolase	U

				A0A5C5NU35	Response regulator transcription factor	U
				A0A5C5NWF0	Uncharacterized protein	U
				A0A5C5NYV7	Twin-arginine translocase TatA/TatE family subunit	U
				A0A5C5P3P7	Rhodanese-like domain-containing protein	U
				A0A5C5NEN6	Flagellar biosynthesis anti-sigma factor FlgM	U
				A0A5C5NY79	ATP-dependent RNA helicase DbpA	U

			A0A5C5P0N7	ATP-dependent protease subunit HslV	U
			A0A5C5NTR6	HIT domain-containing protein	U
			A0A5C5NEU0	DUF805 domain-containing protein	U
			A0A5C5NXT4	Flagellar basal body-associated protein FliL	U
			A0A5C5NH43	YheV family putative metal-binding protein	U
			A0A5C5NDN7	Pyrroloquinoline quinone biosynthesis protein PqqE	U

			A0A5C5N8A8	CHAD domain-containing protein	U
			A0A5C5NV62	Ferredoxin family protein	U
			A0A5C5NXY5	16S rRNA (Uracil(1498)-N(3))-methyltransferase	U
			A0A5C5N7Z5	Uncharacterized protein	U
			A0A5C5NVY2	Methyl-accepting chemotaxis protein	U
			A0A5C5NXB3	Ribose-5-phosphate isomerase RpiA	U
			A0A5C5NK07	Bifunctional diguanylate cyclase/phosphodiesterase	U

			A0A5C5NXC6	DUF1456 family protein	U
			A0A5C5NWU4	Energy transducer TonB	U
			A0A5C5N7N6	Uncharacterized protein	U
			A0A5C5NUI9	Alkylphosphonate utilization protein	U
			A0A5C5NK45	Ribosome maturation factor RimP	U
			A0A5C5NS00	tRNA preQ1(34) S-adenosylmethionine ribosyltransferase-isomerase QueA	U

				A0A5C5NEM8	Carbon storage regulator CsrA	U
				A0A5C5P070	Adenosine deaminase	U
				A0A5C5NYY0	RidA family protein	U
				A0A5C5NS76	Arylformamidase	U
				A0A5C5NR89	DUF2025 family protein	U
				A0A5C5NM56	Uncharacterized protein	U
				A0A5C5NSB7	DUF1244 domain-containing protein	U
				A0A5C5P4H6	Type II 3-dehydroquinate dehydratase	U

			A0A5C5NS69	DUF1311 domain-containing protein	U
			A0A5C5NJ56	Cytochrome c	U
			A0A5C5NJD8	Uncharacterized protein	U
			A0A5C5NVC8	2-C-methyl-D-erythritol 2.4-cyclodiphosphate synthase	U
			A0A5C5NZR6	Transcriptional regulator BetI	U
			A0A5C5NCA5	Efflux RND transporter periplasmic adaptor subunit	U

A0A5C5P2A3	Heavy-metal-associated domain-containing protein	U
A0A5C5ND00	Transcription elongation factor GreAB	U
A0A5C5NWV0	Ribonuclease PH	U
A0A5C5NE41	Uncharacterized protein	U
A0A5C5NX04	Beta-agarase	U
A0A5C5NXS2	Hydrocarbon binding protein	U
A0A5C5NVH3	Cold-shock protein	U
A0A5C5NXP7	Uncharacterized protein	U

			A0A5C5NK46	DNA/RNA non-specific endonuclease	U
			A0A5C5NAL2	Uncharacterized protein	U
			A0A5C5NMV4	KpsF/GutQ family sugar-phosphate isomerase	U
			A0A5C5NPY4	Dephospho-CoA kinase	U
			A0A5C5NIK1	L-threonylcarbamoyladenylate synthase	U
			A0A5C5NZF9	Amino acid ABC transporter permease	U
			A0A5C5NT64	tRNA (Cytosine(32)/uridine(32)	U

				-2'-O)-methyltransferase TrmJ	
			A0A5C5NSX2	Carbon-nitrogen hydrolase family protein	U
			A0A5C5NTH4	Chromosome segregation protein SMC	U
			A0A5C5ND61	Exodeoxyribonuclease VII small subunit	U
			A0A5C5NPY3	Zinc ABC transporter substrate-binding protein	U
			A0A5C5NN30	LysR family transcriptional regulator	U

			A0A5C5NLV5	Uncharacterized protein	U
			A0A5C5NVY4	Guanine deaminase	U
			A0A5C5NJM5	GntR family transcriptional regulator	U
			A0A5C5NA39	Deferrochelatase/peroxidase EfeB	U
			A0A5C5N7Y5	Glutamine synthetase	U
			A0A5C5NRV6	Mannitol dehydrogenase family protein	U
			A0A5C5NS25	Glycosyltransferase family 1 protein	U

A0A5C5NVI7	Flagellar motor switch protein FliN	U
A0A5C5NQ56	Purine nucleoside permease	U
A0A5C5NIJ4	Purine-binding chemotaxis protein CheW	U
A0A5C5NWZ5	DUF2288 domain-containing protein	U
A0A5C5NWC4	Flavodoxin	U
A0A5C5NJP5	Beta-lactamase	U
A0A5C5NSI3	AGE family epimerase/isomerase	U

			A0A5C5NUL8	Uncharacterized protein	U
			A0A5C5NQG1	Uncharacterized protein	U
			A0A5C5NU89	Carbohydrate porin	U
			A0A5C5NTQ4	Cytochrome-c oxidase. cbb3-type subunit I	U
			A0A5C5NXG4	Choline ABC transporter substrate-binding protein	U
			A0A5C5NRB7	Isochorismatase family protein	U
			A0A5C5NIE5	Chemotaxis protein	U
			A0A5C5NCX0	TIM barrel protein	U

				A0A5C5NIH1	DUF1285 domain-containing protein	U
				A0A5C5NX41	Acyl-CoA thioesterase	U
				A0A5C5NE85	Secretin	U
				A0A5C5NHB3	Outer membrane assembly lipoprotein YfiO	U
				A0A5C5NEN1	TetR/AcrR family transcriptional regulator	U
				A0A5C5NVR0	Ribonuclease D	U
				A0A5C5NLR4	50S ribosomal protein L20	U

				A0A5C5NGA2	Response regulator	U
				A0A5C5NPP5	ATP-binding cassette domain-containing protein	U
				A0A5C5NK31	Uncharacterized protein	U
				A0A5C5NQN4	GAF domain-containing protein	U
				A0A5C5P4A9	Nicotinate phosphoribosyltransferase	U
				A0A5C5NEN2	NAD(P)H:quinone oxidoreductase	U

				A0A5C5NE00	tRNA 2-thiouridine(34) synthase MnmA	U
				A0A5C5P065	Serine protein kinase RIO	U
				A0A5C5NZE3	Outer membrane protein assembly factor BamE	U
				A0A5C5NL56	Zinc ABC transporter substrate-binding protein	U
				A0A5C5NES0	DUF3530 family protein	U
				A0A5C5NMZ5	Ribosome-associated protein	U

		A0A5C5NB15	Transcription antitermination factor NusB	U
		A0A5C5NUI2	DUF3509 domain-containing protein	U
		A0A5C5NTM8	Transcription elongation factor GreB	U
		A0A5C5NWZ9	Transcriptional regulator HexR	U
		A0A5C5P3R5	Histidine utilization repressor	U
		A0A5C5NM37	Response regulator transcription factor	U

		A0A5C5NUC1	Cytochrome-c oxidase. cbb3-type subunit II	U

Accession: Uniprot database identification; FC: Fold change; U: Unique protein

Supplementary Table S2. Identified Metabolic pathways for strain *Pseudomonas* sp. C9.

Up regulated		Down regulated		IPR treatment*	
M. Pathway**	**Nº**	**M. Pathway****	**Nº**	**M. Pathway****	**Nº**
Total	76	Total	32	Total	81
Biosynthesis of secondary metabolites	29	Biosynthesis of secondary metabolites	2	Biosynthesis of secondary metabolites	29
Ribosome	22	Biosynthesis of cofactors	2	Two-component system	21
Microbial metabolism in diverse environments	20	Glutathione metabolism	2	Microbial metabolism in diverse environments	20
Carbon metabolism	16	Bacterial secretion system	2	Biosynthesis of amino acids	13
Biosynthesis of amino acids	12	Butanoate metabolism	2	Biosynthesis of cofactors	11
Quorum sensing	6	Biosynthesis of nucleotide sugars	2	Carbon metabolism	9
Citrate cycle (TCA cycle)	6	Oxidative phosphorylation	2	Ribosome	8
Pyruvate metabolism	6	Two-component system	2	ABC transporters	8
Glycolysis / Gluconeogenesis	6	Biofilm formation	2	Quorum sensing	6
Purine metabolism	6	O-Antigen nucleotide sugar biosynthesis	1	Biofilm formation	6
ABC transporters	5	Nucleotide excision repair	1	Butanoate metabolism	6
2-Oxocarboxylic acid metabolism	5	Styrene degradation	1	Phenylalanine. tyrosine. and tryptophan biosynthesis	5
Oxidative phosphorylation	5	Biotin metabolism	1	Glyoxylate and dicarboxylate metabolism	5
Nucleotide metabolism	5	Fatty acid biosynthesis	1	Glycine. serine. and threonine metabolism	5
Butanoate metabolism	5	Microbial metabolism in diverse environments	1	Pyruvate metabolism	5
Bacterial secretion system	4	Quorum sensing	1	Pentose phosphate pathway	5
RNA degradation	4	Protein export	1	Flagellar assembly	4
Methane metabolism	4	Tyrosine metabolism	1	Bacterial chemotaxis	4
Pyrimidine metabolism	4	Fatty acid metabolism	1	Glutathione metabolism	4
Pentose phosphate pathway	4	Cyanoamino acid metabolism	1	Oxidative phosphorylation	4

Glyoxylate and dicarboxylate metabolism	4	Starch and sucrose metabolism	1	Fatty acid metabolism	4
Protein export	3	D-Amino acid metabolism	1	beta-Lactam resistance	4
Glycine. serine and threonine metabolism	3	Pentose phosphate pathway	1	Protein export	4
Starch and sucrose metabolism	3	Biosynthesis of various plant secondary metabolites	1	Bacterial secretion system	4
Propanoate metabolism	3	Phenylalanine metabolism	1	RNA degradation	4
Tryptophan metabolism	3	Pentose and glucuronate interconversions	1	Alanine. aspartate. and glutamate metabolism	3
Biosynthesis of cofactors	2	Degradation of flavonoids	1	Cysteine and methionine metabolism	3
Glutathione metabolism	2	Glyoxylate and dicarboxylate metabolism	1	Nitrogen metabolism	3
Lysine biosynthesis	2	Ascorbate and aldarate metabolism	1	Fatty acid degradation	3
Sulfur relay system	2	Nicotinate and nicotinamide metabolism	1	Nucleotide metabolism	3
One carbon pool by folate	2	Bacterial chemotaxis	1	Purine metabolism	3
C5-Branched dibasic acid	2	RNA degradation	1	Terpenoid backbone biosynthesis	3
Homologous recombination	2			Propanoate metabolism	3
RNA polymerase	2			Pyrimidine metabolism	3
Lipopolysaccharide biosynthesis	2			Cationic antimicrobial peptide (CAMP) resistance	3
Arginine and proline metabolism	2			Starch and sucrose metabolism	3
Sulfur metabolism	2			Benzoate degradation	2
Aminoacyl-tRNA biosynthesis	2			Valine. leucine. and isoleucine degradation	2
Alanine. aspartate. and glutamate metabolism	2			Sulfur metabolism	2
Valine. leucine. and isoleucine biosynthesis	2			Arginine biosynthesis	2
Peptidoglycan biosynthesis	2			Biosynthesis of nucleotide sugars	2
Fructose and mannose metabolism	2			Lysine degradation	2
Benzoate degradation	2			Ubiquinone and other terpenoid-quinone biosynthesis	2

Arginine biosynthesis	2
Valine. leucine. and isoleucine degradation	2
Lysine degradation	2
Folate biosynthesis	1
Lipoic acid metabolism	1
D-Amino acid metabolism	1
Nicotinate and nicotinamide metabolism	1
Histidine metabolism	1
DNA replication	1
Degradation of aromatic compounds	1
Biosynthesis of nucleotide sugars	1
Vancomycin resistance	1
Biofilm formation	1
Two-component system	1
Fatty acid metabolism	1
Efferocytosis	1
Chloroalkane and chloroalkene degradation	1
Pantothenate and CoA biosynthesis	1
Fatty acid biosynthesis	1
Phenylalanine. tyrosine. and tryptophan biosynthesis	1
Cyanoamino acid metabolism	1
Cysteine and methionine metabolism	1
Mismatch repair	1
Streptomycin biosynthesis	1
Galactose metabolism	1
Biosynthesis of nucleotide sugars	1

Porphyrin metabolism	2
Lipopolysaccharide biosynthesis	2
Nucleotide excision repair	2
Tryptophan metabolism	2
2-Oxocarboxylic acid metabolism	2
Mismatch repair	2
Base excision repair	2
Vitamin B6 metabolism	1
Fatty acid biosynthesis	1
Sulfur relay system	1
Exopolysaccharide biosynthesis	1
Non-homologous end-joining	1
Citrate cycle (TCA cycle)	1
beta-Alanine metabolism	1
Phenylalanine metabolism	1
Taurine and hypotaurine metabolism	1
One carbon pool by folate	1
Pantothenate and CoA biosynthesis	1
Homologous recombination	1
Selenocompound metabolism	1
Folate biosynthesis	1
Cyanoamino acid metabolism	1
Glycerophospholipid metabolism	1
Biosynthesis of unsaturated fatty acids	1
Biotin metabolism	1
Riboflavin metabolism	1

Amino sugar and nucleotide sugar metabolism	1			Nicotinate and nicotinamide metabolism	1
Phenylalanine metabolism	1			Lipoic acid metabolism	1
Fatty acid degradation	1			C5-Branched dibasic acid metabolism	1
Caprolactam degradation	1			DNA replication	1
Pinene. camphor and geraniol degradation	1			Porphyrin metabolism	1
Aminobenzoate degradation	1			Valine. leucine. and isoleucine biosynthesis	1
beta-Alanine metabolism	1			Carbapenem biosynthesis	1
				Arginine and proline metabolism	1
				Non-homologous end-joining	1
				Aminobenzoate degradation	1
				Styrene degradation	1
				Biosynthesis of various plant secondary metabolites	1

IPR Treatment*: Only expressed in IPR Treatment; M. Pathway**: Metabolic pathways by KEEG; N°: number of involved proteins.