

Table S1 Evidence for horizontal gene transfer of Rhizobium phenazine gene cluster

Gene ID	Gene Product Name (Query)	Len. (AA)	Id. (%)	Best Hit Genome (Subject)	Best Hit Class
2508002980	hypothetical protein	51	88	<i>Ensifer medicae</i> WSM1369	Alpha
2508002981	Predicted Zn-dependent peptidases	309	91	<i>Ensifer meliloti</i> AK83, DSM 23913	Alpha
2508002982	Predicted Zn-dependent peptidases	282	89	<i>Rhizobium leguminosarum</i> bv. <i>trifolii</i> WSM2012	Alpha
2508002983	Type IV secretory pathway	359	75	<i>Paracoccus</i> sp. TRP	Alpha
2508002984	hypothetical protein	95	72	<i>Rhizobium</i> sp. PDO1-076	Alpha
2508002985	Predicted membrane protein	254	70	<i>Ochrobactrum anthropi</i> ATCC 49188	Alpha
2508002986	Uncharacterized conserved protein	148	81	<i>Rhizobium rhizogenes</i> bv. II K84	Alpha
2508002987	hypothetical protein	77	N/A	N/A	N/A
2508002988	hypothetical protein	257	64	<i>Litoreibacter arenae</i> DSM 19593	Alpha
2508002989	Enzyme related to lactoylglutathione lyase	141	70	<i>Sulfitobacter mediterraneus</i>	Alpha
2508002990	hypothetical protein	45	N/A	N/A	N/A
2508002991	<u>Transposase and inactivated derivatives</u>	197	97	<i>Rhizobium leguminosarum</i> bv. <i>viciae</i> WSM1481	Alpha
2508002992	TIGR02453 family protein	230	45	<i>Balneatrix alpica</i> DSM 16621	Gamma
2508002993	phenazine biosynthesis protein PhzF	289	67	<i>Streptomyces purpureus</i> KA281, ATCC 21405	Actino
2508002994	Putative multicopper oxidases	327	52	<i>Blastococcus saxobidens</i> DD2	Actino
2508002995	hypothetical protein	60	N/A	N/A	N/A
2508002996	Isochorismate hydrolase	207	66	<i>Pseudomonas aeruginosa</i> LESB58	Gamma
2508002997	Anthranilate/para-aminobenzoate synthase	637	56	<i>Streptomyces purpureus</i> KA281, ATCC 21405	Actino
2508002998	hypothetical protein	115	63	<i>Streptomyces purpureus</i> KA281, ATCC 21405	Actino
2508002999	Pyridoxamine 5'-phosphate oxidase	201	56	<i>Nocardiopsis chromatogenes</i> YIM 90109	Actino
2508003000	asparagine synthase	613	69	<i>Streptomyces purpureus</i> KA281, ATCC 21405	Actino
2508003001	Phenazine biosynthesis protein A/B.	160	74	<i>Nocardiopsis chromatogenes</i> YIM 90109	Actino
2508003002	Methylase	344	58	<i>Streptomyces</i> sp. URHA0041	Actino
2508003003	<u>Transposase and inactivated derivatives</u>	115	100	<i>Rhizobium leguminosarum</i> bv. <i>viciae</i> 3841	Alpha
2508003004	hypothetical protein	23	N/A	N/A	N/A
2508003005	<u>Transposase and inactivated derivatives</u>	159	94	<i>Mesorhizobium huakuii</i> 7653R	Alpha
2508003006	hypothetical protein	51	N/A	N/A	N/A
2508003007	hypothetical protein	37	N/A	N/A	N/A
2508003009	replicative DNA helicase	499	99	<i>Rhizobium leguminosarum</i> bv. <i>trifolii</i> WSM1325	Alpha
2508003010	<u>Transposase and inactivated derivatives</u>	233	97	<i>Rhizobium leguminosarum</i> bv. <i>trifolii</i> WSM2012	Alpha

Supplementary Table S1 Evidence for horizontal gene transfer of *Rhizobium* phenazine gene cluster. A blastp search was performed with each protein in and around the biosynthetic gene cluster as the query against all proteins in the IMG database. Proteins are listed in the order they appear on the scaffold and the proteins in the phenazine cluster are in highlighted with grey. Transposase related proteins are underlined. Abbreviations used: Len. for protein length, AA for amino acids, Id. for identity, Alpha for *alpha-proteobacteria*, Gamma for *gamma-proteobacteria* and Actino for *actinobacteria*.