

**Supplementary Table S1.** 16S rRNA gene sequence similarity between strain LD81<sup>T</sup> and type strains of related species of the *Alphaproteobacteria*

Strain	16S rRNA gene sequence accession number	Similarity (%)
<i>Pseudovibrio denitrificans</i> DN34 <sup>T</sup>	AY486423	90.8
<i>Pseudovibrio ascidiaceicola</i> F423 <sup>T</sup>	AB175663	90.7
<i>Mesorhizobium chacoense</i> PR5 <sup>T</sup>	AJ278249	90.0
<i>Ensifer terangae</i> LMG 7834 <sup>T</sup>	X68388	89.7
<i>Pseudaminobacter salicylatoxidans</i> BN12 <sup>T</sup>	AF072542	89.5
<i>Mesorhizobium alexandrii</i> AM1V30 <sup>T</sup>	AJ786600	89.5
<i>Aminobacter aganoensis</i> DSM 7051 <sup>T</sup>	AJ011760	89.5
<i>Ahrensia kielensis</i> IAM 12618 <sup>T</sup>	D88524	89.3
<i>Mesorhizobium mediterraneum</i> UPM-Ca36 <sup>T</sup>	L38825	89.3
<i>Mesorhizobium amorphae</i> ACCC 19665 <sup>T</sup>	AF041442	89.3
<i>Thalassospira profundimaris</i> WP0211 <sup>T</sup>	AY186195	89.2
<i>Mesorhizobium temperatum</i> SDW 018 <sup>T</sup>	AF508208	89.1
<i>Thalassospira xiamensis</i> M-5 <sup>T</sup>	AY189753	89.1
<i>Pleomorphomonas oryzae</i> F-7 <sup>T</sup>	AB159680	89.1
<i>Mesorhizobium septentrionale</i> SDW 014 <sup>T</sup>	AF508207	89.0
<i>Phyllobacterium leguminum</i> ORS 1419 <sup>T</sup>	AY785323	88.9
<i>Hoeflea marina</i> LMG 128 <sup>T</sup>	AY598817	88.9
<i>Thalassospira lucentensis</i> DSM 14000 <sup>T</sup>	AM294944	88.9
<i>Ensifer saheli</i> LMG 7837 <sup>T</sup>	X68390	88.9
<i>Kaistina koreensis</i> Y9 <sup>T</sup>	AB127972	88.9
<i>Mesorhizobium huakuii</i> IAM 14158 <sup>T</sup>	D12797	88.8
<i>Ensifer fredii</i> ATCC 35423 <sup>T</sup>	D14516	88.8
<i>Ensifer kummerowiae</i> CCBAU 71714 <sup>T</sup>	AF364067	88.5
<i>Terasakiella pusilla</i> IFO 13613 <sup>T</sup>	AB006768	88.4