Strains or plasmids	Relevant characteristics/description	Source or reference
Sinorhizobium melilo	<i>pti</i>	
RmP3496	S. meliloti ΔpSymAB	[1]
RmP3499	RmP3496 with pSymA and pSymB re-introduced	[1]
AB001	$\Delta proC$ in RmP3496	This study
AB002	Δ <i>proC</i> in RmP3499	This study
AB003	$\Delta cbrA$ in RmP3496	This study
AB004	$\Delta cbrA$ in RmP3499	This study
AB005	Δtig in RmP3496	This study
AB006	Δtig in RmP3499	This study
AB007	$\Delta feuQ$ in RmP3496	This study
AB008	$\Delta feuQ$ in RmP3499	This study
AB009	Δppk in RmP3496	This study
AB010	Δppk in RmP3499	This study
AB011	Δ <i>smc</i> 00712 in RmP3496	This study
AB012	Δ <i>smc</i> 00712 in RmP3499	This study
AB013	$\Delta rhaK$ in RmP3496	This study
AB014	$\Delta rhaK$ in RmP3499	This study
AB015	∆amiC in RmP3499	This study
AB016	∆ <i>fbpB</i> in RmP3499	This study
AB017	$\Delta aidB$ in RmP3499	This study
AB018	Δsmc00575 in RmP3499	This study
AB019	Δtal in RmP3499	This study
AB020	$\Delta kpsF3$ in RmP3499	This study
AB026	$\Delta carA$ in RmP3499	This study
AB021	$\Delta carA$ in RmP3496	This study
AB022	$\Delta exoN2$ in RmP3499	This study
AB024	$\Delta coaA$ in RmP3499	This study
AB033	$\Delta coaA$ in RmP3496	This study
AB025	Δ <i>smc</i> 00074 in RmP3499	This study
AB034	$\Delta smc00074$ in RmP3496	This study
AB028	Δ <i>smc01361</i> in RmP3499	This study
AB029	$\Delta argD$ in RmP3499	This study
AB037	$\Delta argD$ in RmP3496	This study
AB030	$\Delta i l v C$ in RmP3499	This study
AB031	$\Delta serC$ in RmP3499	This study
AB032	Δ <i>smc</i> 04042 in RmP3499	This study
Escherichia coli		
DH5a	E. coli cloning and expression strain	[2]
B001	DH5a harboring helper plasmid pRK600 (Cm ^R)	[3]
Plasmids		
pJG194	2.2 kb mobilizable suicide plasmid (Km ^R /Nm ^R)	[4]
pRK600	Self-transmissible helper plasmid (Cm ^R)	[3]
pJG714	Transposon delivery vector for Tn-seq (Km ^R /Nm ^R)	This study
pAB001	ftsK fragment cloned into pJG194	This study
pAB004	proC fragment cloned into pJG194	This study
pAB006	smc00074 fragment cloned into pJG194	This study
pAB008	amiC fragment cloned into pJG194	This study
pAB010	<i>fbpB</i> fragment cloned into pJG194	This study
pAB012	cbrA fragment cloned into pJG194	This study
pAB014	tig fragment cloned into pJG194	This study
pAB016	feuQ fragment cloned into pJG194	This study
pAB018	aidB fragment cloned into pJG194	This study
pAB019	ppk fragment cloned into pJG194	This study

Table S5. Bacterial strains and plasmids.

pAB021	smc00575 fragment cloned into pJG194	This study
pAB023	tal fragment cloned into pJG194	This study
pAB024	kspF3 fragment cloned into pJG194	This study
pAB025	exoN2 fragment cloned into pJG194	This study
pAB026	smc00712 fragment cloned into pJG194	This study
pAB027	carA fragment cloned into pJG194	This study
pAB028	coaA fragment cloned into pJG194	This study
pAB031	smc02836 fragment cloned into pJG194	This study
pAB032	rhaK fragment cloned into pJG194	This study
pAB033	argD fragment cloned into pJG194	This study
pAB034	smc04042 fragment cloned into pJG194	This study
pAB035	smc01361 fragment cloned into pJG194	This study
pAB036	<i>ilvC</i> fragment cloned into pJG194	This study
pAB037	serC fragment cloned into pJG194	This study
pAB038	smc01011 knock out 1 fragment cloned into pJG194	This study
pAB039	smc01011 knock out 2 fragment cloned into pJG194	This study
pAB040	smc01011 Non-disruption fragment cloned into pJG194	This study
pAB041	smc03995 knock out 1 fragment cloned into pJG194	This study
pAB042	smc03995 knock out 2 fragment cloned into pJG194	This study
pAB043	smc03995 Non-disruption fragment cloned into pJG194	This study
pAB047	<i>fumC</i> Non-disruption fragment cloned into pJG194	This study
pAB048	fumC knock out 1 fragment cloned into pJG194	This study
pAB049	fumC knock out 2 fragment cloned into pJG194	This study
pAB050	<i>pdxJ</i> Non-disruption fragment cloned into pJG194	This study
pAB051	pdxJ knock out 1 fragment cloned into pJG194	This study
pAB052	<i>pdxJ</i> knock out 2 fragment cloned into pJG194	This study

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