

## Bacterial strains used in this study

Strain	Relevant Characteristics	Details
MG1655	$\lambda$ F <sup>-</sup> Fim <sup>+</sup>	ECGSC (31)
AAEC072A	MG1655 $\Delta$ <i>fimB-H</i>	(33)
AAEC370A	MG1655 $\Delta$ <i>lacZYA fimE-am18 fimA-lacZYA</i>	(60)
AAEC554	MG1655 ( <i>fimS</i> locked ON)	(61)
BGEC905	MG1655 $\Delta$ <i>lacZYA</i> FimB-LacZ	(45)
JW5267	BW25113 $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	Keio collection (39)
KCEC357	BGEC905 $\Delta$ <i>nanR</i>	(45)
KCEC505	BGEC905 <i>nagC</i> $\Omega$ Tet <sup>R</sup>	(45)
KCEC755	BGEC905 <i>hns::mTn10</i>	our unpublished work
KCEC840	BGEC905 $\Delta$ <i>ApaLI-BamHI</i> $\Omega$ ( <i>sacB</i> -Kan <sup>R</sup> )	our unpublished work
KCEC1077	BGEC905 <i>rm21</i>	Allelic exchange (KCEC840)
KCEC1079	BGEC905 <i>rm22</i>	Allelic exchange (KCEC840)
KCEC1235	MG1655 $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	P1 transduction (MG1655)
KCEC1243	BGEC905 $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	P1 transduction (BGEC905)
KCEC1271	BGEC905 <i>rm21</i> $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	P1 transduction (KCEC1077)
KCEC1273	BGEC905 <i>rm22</i> $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	P1 transduction (KCEC1079)
KCEC1275	BGEC905 $\Delta$ <i>nanR</i> $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	P1 transduction (KCEC357)
KCEC1278	BGEC905 <i>nagC</i> $\Omega$ Tet <sup>R</sup> $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	P1 transduction (KCEC1243)
KCEC1300	BGEC905 $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup> <i>hns::mTn10</i>	P1 transduction (KCEC1243)
KCEC1334	BGEC905 $\Delta$ <i>slyA</i>	Kan <sup>R</sup> curing (KCEC1243)
KCEC1360	AAEC370A $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	P1 transduction (AAEC370A)
KCEC1398	BGEC905 $\Delta$ <i>slyA</i> $\Delta$ <i>lacZYA</i> $\Omega$ ( <i>sacB</i> -Kan <sup>R</sup> )	P1 transduction (KCEC1334)
KCEC1494	BGEC905 $\Delta$ <i>slyA</i> <i>lacUV5-slyA</i> <sub>UUG</sub>	Allelic exchange (KCEC1398)
KCEC1765	BGEC905 $\Delta$ <i>slyA</i> <i>lacUV5-slyA</i> <sub>AUG</sub>	Allelic exchange (KCEC1398)
KCEC1831	BGEC905 <i>rm35</i>	Allelic exchange (KCEC840)
KCEC1854	BGEC905 <i>rm35</i> $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	P1 transduction (KCEC1854)
KCEC2014	BGEC905 <i>rm39</i>	Allelic exchange (KCEC840)
KCEC2016	BGEC905 <i>rm40</i>	Allelic exchange (KCEC840)
KCEC2020	BGEC905 <i>rm39</i> $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	P1 transduction (KCEC2014)
KCEC2022	BGEC905 <i>rm40</i> $\Delta$ <i>slyA</i> $\Omega$ Kan <sup>R</sup>	P1 transduction (KCEC2016)