

Table S1. Strains used in this study

Strain	Description	Source
<i>Escherichia coli</i> strain BW25113	wild-type strain	Coli Genetic Stock Center
<i>Escherichia coli</i> strain WM3064	conjugation donor strain	William Metcalf, University of Illinois
<i>Shewanella amazonensis</i> SB2B	wild-type strain	James Tiedje, Michigan State University
<i>Phaeobacter inhibens</i>	wild-type strain	DSM 17395
<i>Shewanella oneidensis</i> MR-1	wild-type strain	ATCC 700550
<i>Pseudomonas stutzeri</i> RCH2	wild-type strain	Romy Chakraborty, LBNL
psRCH2_ML7	<i>Pseudomonas stutzeri</i> RCH2 transposon mutant library	this study
SB2B_ML5	<i>Shewanella amazonensis</i> SB2B transposon mutant library	this study
Phaeo_ML1	<i>Phaeobacter inhibens</i> transposon mutant library	this study
KEIO_ML9	<i>Escherichia coli</i> strain BW25113 transposon mutant library	this study
MR1_ML3	<i>Shewanella oneidensis</i> MR-1 transposon mutant library	this study
APA752	<i>mariner</i> vector library pKMW3 in WM3064	this study
APA766	<i>Tn5</i> vector library pKMW7 in WM3064	this study