

1 **SUPPLEMENTARY MATERIALS**

2 **Table S1. List of experimentally and non-experimentally demonstrated NIS synthetases**  
 3 **used for the construction of the phylogenetic Neighbor-Joining Tree.** Accession numbers  
 4 and organisms in which the function of the NIS synthetases was demonstrated are displayed in  
 5 the table. The letters used to identify the NIS type refer to the substrates: A, citric acid; B,  $\alpha$ -  
 6 ketoglutarate intermediates; and C, citryl or succinyl-based intermediates.

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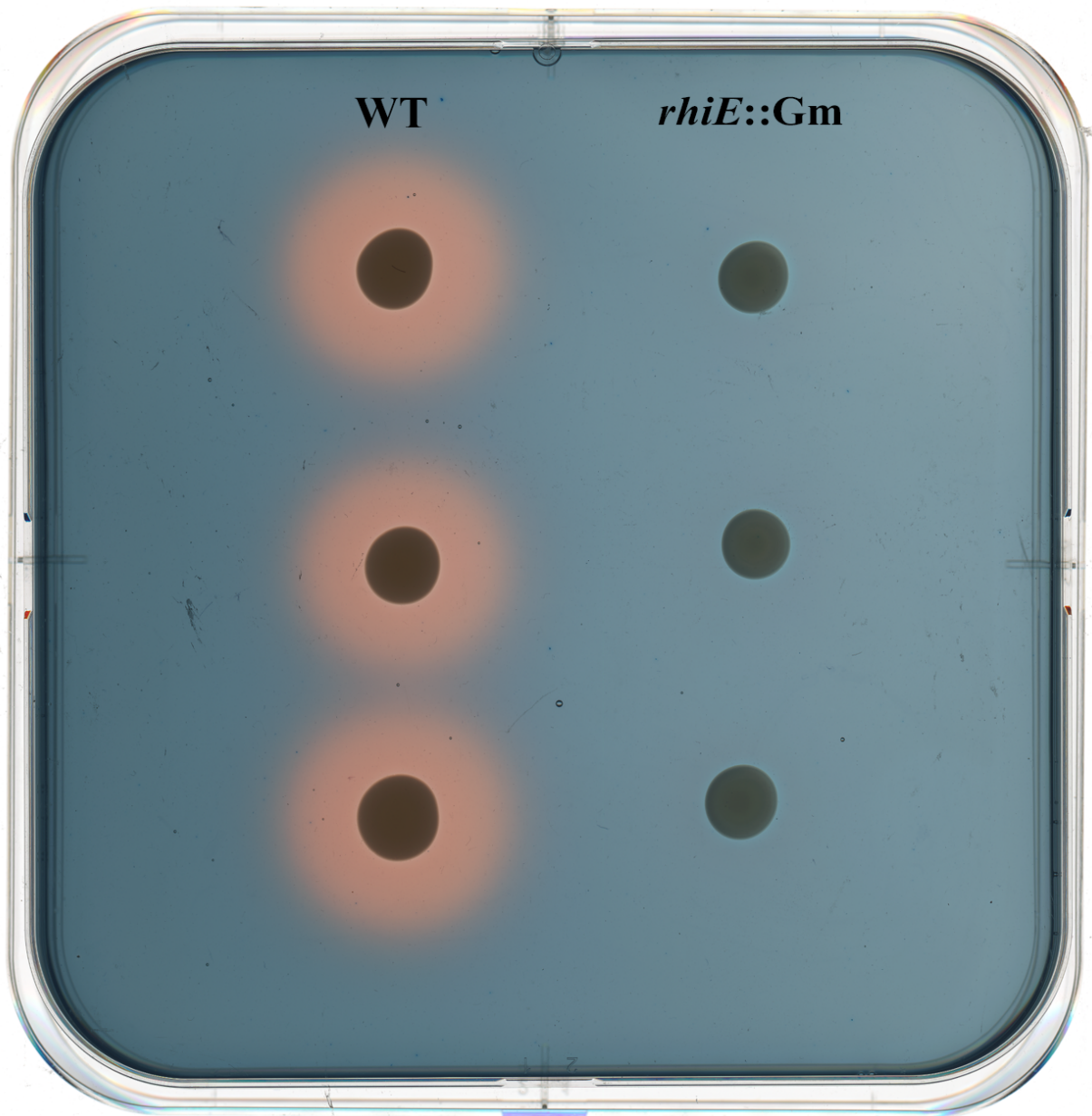
Accession number	Gene ID	Organism	Experimentally demonstrated*	NIS type	Siderophore
AAAY37628.1	<i>acsA</i>	<i>Pseudomonas syringae</i> B728a	Yes	B	Achromobactin
AAAY37626.1	<i>acsC</i>	<i>Pseudomonas syringae</i> B728a	Yes	C	Achromobactin
AAAY37623.1	<i>acsD</i>	<i>Pseudomonas syringae</i> B728a	Yes	A	Achromobactin
QHI23110.1	<i>acbA</i>	<i>Acinetobacter haemolyticus</i>	Yes	A	Acinetoferrin
QHI23108.1	<i>acbC</i>	<i>Acinetobacter haemolyticus</i>	Yes	C	Acinetoferrin
UIM78503.1	<i>iucA</i>	<i>Escherichia coli</i> O2H1	Yes	A	Aerobactin
UIM78504.1	<i>iucC</i>	<i>Escherichia coli</i> O2H1	Yes	C'	Aerobactin
WP_059270381.1	<i>alcC</i>	<i>Achromobacter denitrificans</i>	Yes	C'	Alcalign
QTE80720.1	<i>avbD</i>	<i>Shewanella algae</i>	Yes	B	Avaroferrin
QFI42889.1	<i>desD</i>	<i>Streptomyces coelicolor</i> A3	Yes	C'	Desferroxiamine D
WP_011213627.1	<i>lbtA</i>	<i>Legionella pneumophila</i>	Yes	A'	Legiobactin
WP_000679659.1	<i>asbA</i>	<i>Bacillus anthracis</i>	Yes	A	Petrobactin
WP_011053144.1	<i>asbB</i>	<i>Bacillus anthracis</i>	Yes	C	Petrobactin

AVV86182.1	<i>pubC</i>	<i>Shewanella putrefaciens</i>	Yes	C'	Putrebactin
AAK65918.1	<i>rhbC</i>	<i>Ensifer meliloti</i> 1021	Yes	C	Rhizobactin
AAK65921.1	<i>rhbF</i>	<i>Ensifer meliloti</i> 1021	Yes	A	Rhizobactin
WP_082163293.1	<i>rhiE</i>	<i>Caballeronia mineralivorans</i>	This study		Rhizobactin
WP_041915341.1	-	<i>Ensifer meliloti</i> DM4	No		Rhizobactin
WP_191487624.1	-	<i>Pseudomonas</i> FEN	No		Rhizobactin B
ABE27278.1	<i>fslA</i>	<i>Francisella tularensis</i>	Yes	A'	Rhizoferrin
QWF25631.1	<i>sfab</i>	<i>Staphylococcus aureus</i> RN4220	Yes	A'	Staphyloferrin A
QWF25633.1	<i>sfad</i>	<i>Staphylococcus aureus</i> RN4220	Yes	A'	Staphyloferrin A
BAC63002.1	<i>sbnC</i>	<i>Staphylococcus aureus</i> RN4220	Yes	B	Staphyloferrin B
QWF26222.1	<i>sbnE</i>	<i>Staphylococcus aureus</i> RN4220	Yes	A	Staphyloferrin B
QWF26223.1	<i>sbnF</i>	<i>Staphylococcus aureus</i> RN4220	Yes	C	Staphyloferrin B
BAC63002.1	<i>pvsB</i>	<i>Vibrio parahaemolyticus</i> 2210633	Yes	B	Vibrioferrin
BAC63004.1	<i>pvsD</i>	<i>Vibrio parahaemolyticus</i> 2210633	Yes	A	Vibrioferrin
BAC63002.1	<i>pvsB</i>	<i>Vibrio parahaemolyticus</i> 2210633	Yes	B	Vibrioferrin

BAC63004.1	<i>pvsD</i>	<i>Vibrio</i> <i>parahaemolyticus</i> 2210633	Yes	A	Vibrioferin
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8 \* Evidence of production and chemical characterization of the siderophore.

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35 **Figure S1.** *Caballeronia mineralivorans* PML1(12) WT (top) and its *rhiE::Gm* mutant

36 (bottom) were incubated for 3 days at 25 °C on CAS solid medium. The presence of a

37 siderophore activity is determined by the production of yellow halo around the colony.

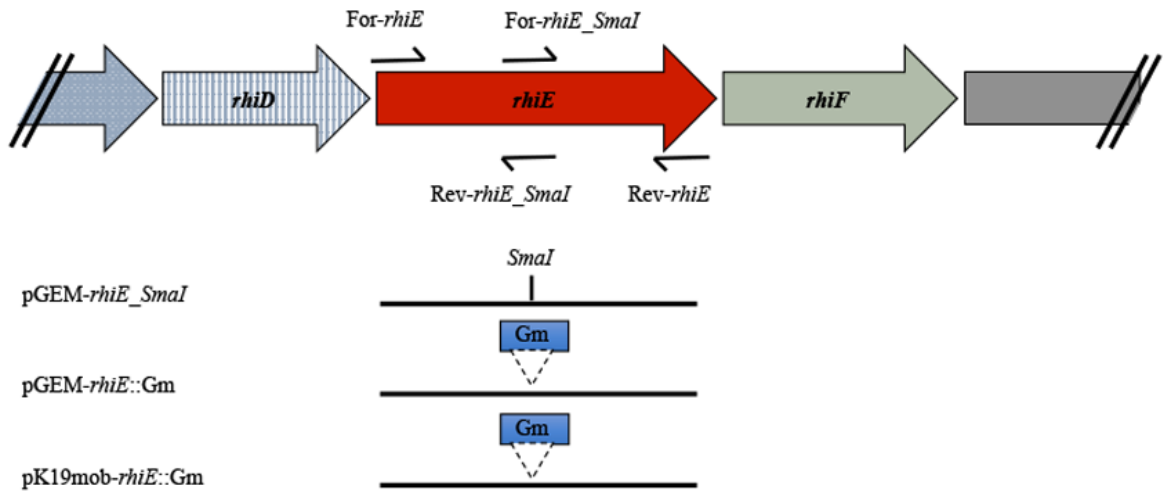
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45 **Figure S2. Scheme of the gene region and plasmids used to construct *rhiE::Gm* mutant.**

46 Broken arrows symbolize the primers used for subcloning. Restriction sites used for subcloning

47 are shown. See Table 2 for a complete description of the plasmids and primers used.

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