

Supplementary Table S1

Table S1 A. *N. punctiforme* strains and oligonucleotides used in this work.

<i>N. punctiforme</i> strains	Relevant characteristics and details of mutants construction	Oligonucleotides used to confirm homozygosity of mutants
WT	UCD 153: ATCC 29133 wild-type derivate, scytonemin producer (Campbell <i>et al.</i> , 2007)	
$\Delta scyE$	scytoneminless mutant (Ferreira and Garcia-Pichel, 2016)	
Δebo	Npun_F5232 to Npun_F5236 knockout. Primers used to create a 5364 bp deletion: sat-XhoI: ATCATCCTCGAGCGACAAATCCACCTGGTGGACTTC satI1: ACGCGGTACAGCACTAAATGCC satI2: GGCATTTAGTGCTGTACCGCGTGGCTCTCACGGTAATATCACACCAC satR: CCCGACTTCTTCAGAAATCGGG	satF: AAGTTGGGCAACTTCTCCTG satR2: GCTGGATAAGGGTTACGTAG satF2: GGGTAAACAAGCCTACCATC F5234R satF3: GCCAAACTGGGCAGATGAAAGC F5232R
$\Delta eboA$	Npun_F5232 knockout. Primers used to create a 606 bp deletion: sat-XhoI satI1 F5232I2: GGCATTTAGTGCTGTACCGCGTTGTGCCGAGTCTCCTTTACC F5232R: GCCGATGGAATCCACCATAAGG	satF F5233I1 satR2 F5232F: CTGTAGGGCGGTTTGGCGGATAG
$\Delta eboB$	Npun_F5233 knockout. Primers used to create a 720 bp deletion: sat-XhoI F5233I1: CGTAAGTAGTACGGGAACAC F5233I2: GTGTTCCCGTACTACTTACGCGCAAACCTGGGCAGATGAAAGC F5233R: ACGCGCAAACACAGATTGTGG	F5232F F5234I1 F5233R2: AAGCGTTCACGCTACAAGAC F5235L-XhoI
$\Delta eboC$	Npun_F5234 knockout. Primers used to create a 657 bp deletion: F5234L-XhoI: ATCGCGCTCGAGAAGTTGGGCAACTTCTCCTG F5234I1: AGCCGGAAGCAGCGAAACCTAC F5234I2: GTAGGTTTCGCTGCTTCCGGCTTAGCCGAAATATCCGAAATGCG F5234R: CAGCCTCTATACTGCCTTTC	satF3 F5232R F5234R2: CCGCCGCGGTATAAACCACTTG F5234F: CGATCGCAGCACTACCATTTCG
$\Delta eboE$	Npun_F5235 knockout. Primers used to create a 768 bp deletion: F5235L-XhoI: ATCGCGCTCGAGGCTAGTCAGTTTGGCATCCAACAC F5232R F5235I2: CCTTATGGTGGATTCCATCGGCCTACCCAAGATGACATCGCTACTG F5235R: CTGAATACACATCCGCCACTTAGG	F5234F F5236I1 F5233R F5235F: ACGTCGCACTGATGGTACTG
$\Delta eboF$	Npun_F5236 knockout. Primers used to create a 1131 bp deletion: F5236L-XhoI: ATCGCGCTCGAGGGCGGATATTCTGTAGGTTTCG F5236I1: ATTGACGCTACCTGTCTTTTCG F5236I2: CGAAAGGACAGGTAGCGTCAATTGGCTCTCACGGTAATATCAC satR	F5235F F5234R F5236R2: GCGACAATCCCATGTTTCATC satF2

Underlined letters indicate introduced XhoI restriction endonuclease cleavage site.

Table S1 B. *E. coli* strains and oligonucleotides used in this work

<i>E. coli</i> strains	Relevant characteristics and details of mutant construction	Oligonucleotides used to confirm mutants
<i>E. coli</i> harboring pRSFDuet: <i>scyABC</i>	Forward primer containing NcoI restriction site: 5'-GCCGCCCATATGACTATACTGGTTCC-3' Reverse primer containing SacI restriction site: 5'-TTAGTTGGGAAGTGGGATTCTTG-3'	5'- GCCGCCCATATGACTATACTGGTTCC- 3'
<i>E. coli</i> harboring pRSFDuet: <i>scyABC-scyEF</i>	Forward primer containing NdeI restriction site 5'-TGGGATTCGTTGTCTTTAAACCC-3' Reverse primer containing FseI restriction site 5'-TCAGCATTGTTGCTTTTGCAGTTCTTTC-3'	5'- TGGGATTCGTTGTCTTTAAACCC- 3'