

**Table S1. Strains and plasmids used in this study.**

Strain or plasmid	Description	Resource
<b><i>S. coelicolor</i> strains</b>		
M145	Wild type strain that produces multiple antibiotics, <i>spc1</i> <sup>-</sup> and <i>spc2</i> <sup>-</sup>	Lab stock
$\Delta adpA$	M145 strain with disruption of <i>adpA</i> gene, Apr <sup>R</sup>	[1]
$\Delta adpA::adpA$	$\Delta adpA$ complemented with pComadpA, Apr <sup>R</sup> , Hyg <sup>R</sup>	[1]
$\Delta adpA::pMS82$	$\Delta adpA$ complemented with pMS82 vector, Apr <sup>R</sup> , Hyg <sup>R</sup>	[1]
wt:: <i>trxA4</i>	wt complemented with pCom <i>trxA4</i> , Hyg <sup>R</sup>	This study
wt:: <i>trxA</i>	wt complemented with pCom <i>trxA</i> , Hyg <sup>R</sup>	This study
wt:: <i>trxB</i>	wt complemented with pCom <i>trxB</i> , Hyg <sup>R</sup>	This study
wt:: <i>trxA3</i>	wt complemented with pCom <i>trxA3</i> , Hyg <sup>R</sup>	This study
<b><i>E. coli</i> strains</b>		
DH5 $\alpha$	Cloning strain	Lab stock
BL21 (DE3)	Host used for protein expression	Lab stock
ET12567(pUZ8002)	Strain used for conjugation, with plasmid pUZ8002, Km <sup>R</sup> , Cm <sup>R</sup>	Lab stock
BL21 (DE3)AdpA	Protein expression host with pET-AdpA, Amp <sup>R</sup>	This study
<b>Plasmids</b>		
pJTU1278	The shuttle vector for gene mutation, Amp <sup>R</sup>	Lab stock
pJTU- <i>adpA</i>	pJTU1278 derivative for <i>adpA</i> disruption, Apr <sup>R</sup> , Amp <sup>R</sup>	[1]
pIJ773	Template for apramycin resistance gene, Apr <sup>R</sup>	Lab stock
pET-15b	Expression vector for proteins, Amp <sup>R</sup>	Lab stock
pEX-AdpA	<i>adpA</i> expression vector, Amp <sup>R</sup>	[1]
pMS82	Integrative vector for gene complementation, Hyg <sup>R</sup>	Lab stock
pMS82- <i>trxA4</i>	pMS82 derivative for <i>trxA4</i> ( <i>sco5419</i> ) gene complementation, Hyg <sup>R</sup>	This study
pMS82- <i>trxA</i>	pMS82 derivative for <i>trxA</i> ( <i>sco3889</i> ) gene complementation, Hyg <sup>R</sup>	This study
pMS82- <i>trxB</i>	pMS82 derivative for <i>trxB</i> ( <i>sco3890</i> ) gene complementation, Hyg <sup>R</sup>	This study
pMS82- <i>trxA3</i>	pMS82 derivative for <i>trxA3</i> ( <i>sco0885</i> ) gene complementation, Hyg <sup>R</sup>	This study

1. Lu, T.; Wu, X.; Cao, Q.; Xia, Y.; Xun, L.; Liu, H. Sulfane sulfur posttranslationally modifies the global regulator AdpA to influence actinorhodin production and morphological differentiation of *Streptomyces coelicolor*. *mBio* **2022**, *13*, e0386221.