

Additional file 4 – Comparison of gene expression profiles between *S. coelicolor bldA*-dependent and *S. lividans* AdpA-dependent genes

genes ^a	genes ^b	annotated function ^b	in <i>adpA</i> <i>S. lividans</i> ^f	in <i>bldA S.</i> <i>coelicolor</i> ^d	AdpA-binding site ^e
<u>TTA-containing genes:</u>					
SCO0383	SLI0341	hypothetical protein	down		no
SCO0399	SLI0357	putative membrane protein	down		no
SCO2792 <i>adpA</i>	SLI3139	araC-family transcriptional regulator	down		putative
SCO3776	SLI4019	putative membrane protein	up		no
SCO4114	SLI4345	sporulation associated protein	down		putative
SCO4671	SLI4944	putative lysR-family regulatory protein	up		putative
SCO6075	SLI6468	conserved hypothetical protein	up		no
SCO6384	-	putative integral membrane lysyl-tRNA synthetase	down		putative
SCO7070	SLI7275	hypothetical protein SC4G1.36	up		putative
SCO7233	SLI7449	putative secreted protein.	down		no
SCO7251	SLI7467	conserved hypothetical protein	down		putative
<u>Non TTA-containing gene:</u>					
SCO0392	SLI0350	putative methyltransferase	down	down	no
SCO0498 <i>cchB</i>	SLI0458*	putative peptide monooxygenase	down	down	yes
SCO0499 <i>cchA</i>	SLI0459*	putative formyltransferase	down	down	yes
SCO0762 <i>sti1</i>	SLI0743*	protease inhibitor precursor	down	down	yes
SCO1222	SLI1501	conserved hypothetical protein	down	down	putative
SCO1626 <i>rarE</i>	SLI1930	putative cytochrome P450	down	down	no
SCO1968 <i>glpQ2</i>	SLI2284	putative secreted hydrolase	down	down	putative
SCO2435	SLI2769	conserved hypothetical protein	down	down	putative
SCO2780 <i>desE</i>	SLI3127	putative secreted protein	up	down	no
SCO3123	SLI3480	ribose-phosphate pyrophosphokinase	up	up	putative
SCO3917	SLI4175	conserved hypothetical protein	down	down	putative
SCO4187	SLI4427	putative membrane protein	down	down	putative
SCO4295 <i>scoF4</i>	SLI4532	cold shock protein	down	down	putative
SCO4762 <i>groEL1</i>	SLI5032	60 kD chaperonin cpn60	down	down	putative
SCO5123	SLI5404	putative small membrane protein	down	down	putative
SCO5249	SLI5540	putative nucleotide-binding protein	down	down	putative
SCO6197	SLI6586*	putative secreted protein	down	down	yes
SCO6198	SLI6587	putative secreted protein	down	down	yes
SCO6808	SLI1107	putative ArsR-family transcriptional regulator	down	down	putative
SCO7221	SLI7437	putative polyketide synthase.	up	up	putative
SCO7399 <i>cdtB</i>	SLI7618	possible binding-protein-dependent transport lipoprotein	up	up	no
SCO7400 <i>cdtC</i>	SLI7619	putative ABC-transport protein. ATP-binding component	down	down	no
SCO7657 <i>hyaS</i>	SLI7885*	putative secreted protein	down	down	yes

a. *bldA*-dependent TTA-containing genes according to Li et al. [46]. SCO6384 might not have an ortholog gene in *S. lividans*.

b. Gene names and annotated function are from the StrepDB database [7]. *S. lividans* genes indicated with a star were analyzed by qRT-PCR and genes in bold were analyzed by EMSA experiments for direct *in vitro* AdpA binding (this study, [25]).

c. Gene expression in the *S. lividans adpA* mutant determined from expression profiles (Additional file 2).

d. Gene expression and/or protein levels in the *S. coelicolor bldA* mutant [42, 47, 48].

e. Putative *S. coelicolor* AdpA-binding sites identified *in silico* using PREDetector [39] (score values are indicated in Additional file 5). We confirmed that *S. lividans* AdpA binds to some promoter by EMSA experiments in Figure 2 [25].