

**Table S1** Overview of all transcriptome microarray datasets of *Streptomyces coelicolor* used in the present work

Microarray	<i>S. coelicolor</i> strain	Culture medium (liquid)	Culture temperature	Fermentation vessel <sup>a</sup>	Sampling number	Gene number	Source
GSE2983	M145	Modified R5 medium	28 °C	NA	10	4960	Huang et al. [1]
GSE18489	M145	Fermentation medium	30 °C	3-L Fermentor	32	8205	Nieselt et al. [2]
GSE30569	M145	SSBM-E	30 °C	3-L Fermentor	30	8205	Waldvogel et al. [3]
GSE53562	M145	SMM	28 °C	250 ml Flask	7	7729	Our lab
GSE44415	M145	AM media	37 °C	NA	13	7715	Strakova et al. [4]
GSE30570	The <i>glnK</i> mutant (SCglnK-3) of M145	SSBM-E	30 °C	3-L Fermentor	16	7,893	Waldvogel et al.[3]
GSE31068	The <i>phoP</i> mutant (INB201) of M145	The same as GSE18489	30 °C	3-L Fermentor	36	7,893	Thomas et al.[5]
GSE53563	M145 and its <i>scbR2</i> knock-out mutant	SMM +/- jadomycin B	28 °C	250 ml Flask	1	7,729	Our lab

<sup>a</sup> NA indicates the fermentation vessel is unknown from the corresponding reference.

#### Reference

1. Huang J, Lih CJ, Pan KH, Cohen SN: **Global analysis of growth phase responsive gene expression and regulation of antibiotic biosynthetic pathways in *Streptomyces coelicolor* using DNA microarrays.** *Genes Dev* 2001, **15**:3183-3192.
2. Nieselt K, Battke F, Herbig A, Bruheim P, Wentzel A, Jakobsen O, Sletta H, Alam M, Merlo M, Moore J, et al: **The dynamic architecture of the metabolic switch in *Streptomyces coelicolor*.** *BMC Genomics* 2010, **11**:10.

3. Waldvogel E, Herbig A, Battke F, Amin R, Nentwich M, Nieselt K, Ellingsen TE, Wentzel A, Hodgson DA, Wohlleben W, Mast Y: **The PII protein GlnK is a pleiotropic regulator for morphological differentiation and secondary metabolism in *Streptomyces coelicolor*.** *Appl Microbiol Biotechnol* 2011, **92**:1219-1236.
4. Strakova E, Zikova A, Vohradsky J: **Inference of sigma factor controlled networks by using numerical modeling applied to microarray time series data of the germinating prokaryote.** *Nucleic Acids Re* 2014, **42**:748-763.
5. Thomas L, Hodgson DA, Wentzel A, Nieselt K, Ellingsen TE, Moore J, Morrissey ER, Legaie R, Consortium TS, Wohlleben W, et al: **Metabolic Switches and Adaptations Deduced from the Proteomes of *Streptomyces coelicolor* Wild type and *phoP* mutant grown in batch culture.** *Mol Cell Proteom* 2012, **11**.