## Deciphering the way $\sigma^S$ -containing RNA polymerase ( $E\sigma^S$ ) targets its promoters in *Escherichia coli*

## Dissertation

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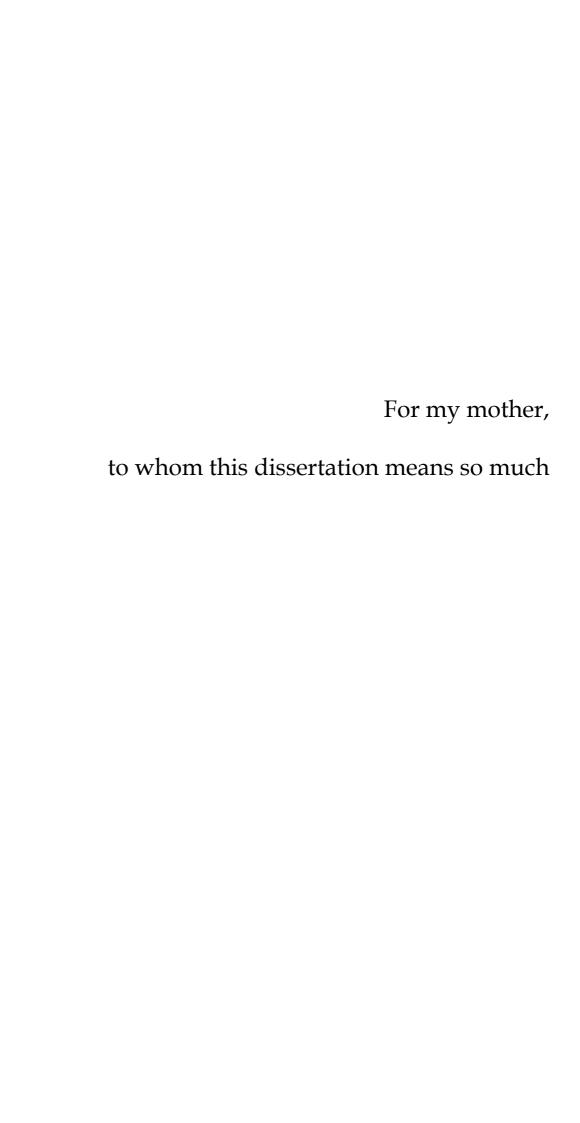
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1. Gutachter: Prof. Dr. Regine Hengge

2. Gutachter: Prof. Dr. Kürsad Turgay

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Parts of this study have been or will be published in the following journals:

- 1. **Typas, A.** and Hengge, R. (2005) Differential ability of  $\sigma^s$  and  $\sigma^{70}$  of *Escherichia coli* to utilise promoters containing half or full UP-element sites. *Mol Microbiol*, **55** (1), 250-60
- 2. **Typas, A.** and Hengge, R. (2006) Role of the spacer between the -35 and -10 regions in σ<sup>s</sup> promoter selectivity in *Escherichia coli*. *Mol Microbiol*, **59** (3), 1037-51
- 3. **Typas, A.**, Stella, S., Johnson, R.C. and Hengge, R. (2006) The –35 sequence location and the Fis-sigma factor interface determine σ<sup>S</sup> selectivity of the *proP* (P2) promoter in *Escherichia coli*. *Mol Microbiol*, in press.
- 4. **Typas, A.**, Barembruch, C., Possling, A. and Hengge, R. (2006) Stationary phase reorganisation of the *E. coli* transcription machinery by Crl protein, a fine-tuner of  $\sigma^s$  activity and levels. *EMBO J*, in revision
- 5. **Typas, A.**, Becker, G. and Hengge R. (2006) The molecular basis of selective promoter activation by the  $\sigma^{S}$  subunit of RNA polymerase *Mol. Microbiol*, invited MicroReview, submitted.
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