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Title (English)

Developing a model for dynamic relocation of Soj in *Bacillus subtilis*

Title (Swedish)

Abstract

The mechanisms used to self-organize complex subcellular structures are of vital importance in biology, but are nevertheless poorly understood. In this study we examine a key example of bacterial self-organization, namely internucleoid jumping of the Soj protein in *Bacillus subtilis*. We develop a mathematical model, with assumptions based closely on experiment, to explain the Soj jumping via a dynamical instability.

Keywords

Soj, Spo0J, dynamic oscillations, self-organization, reaction-diffusion

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