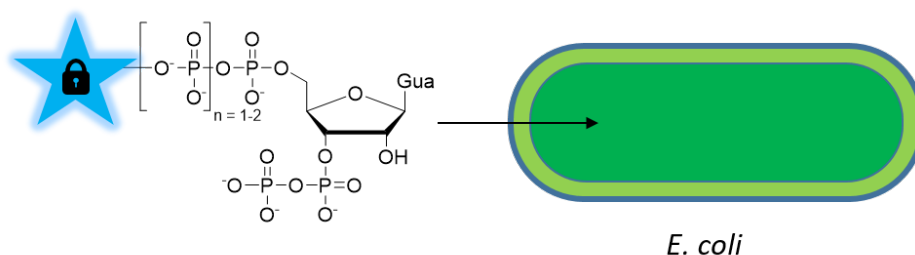


Delivery of Caged Magic Spot Nucleotides into *Escherichia coli*

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Magic spot nucleotides (MSN) are bacterial alarmones involved in the highly conserved stringent response, a bacterial stress response mechanism enabling survival in challenging environments. New chemical tools such as photocaged MSN-analogues are important to better understand the cellular implications of these signalling molecules. Here we describe the synthesis of caged and clickable MSN analogues and their delivery into *E. coli* cells. These highly phosphorylated nucleotides contain multiple negative charges and cannot permeate bacterial cell membranes spontaneously. Hence, the synthetic nucleoside triphosphate transporter described by ZAWADA *et al.* in 2020 was efficiently applied for cellular MSN delivery. The novel probes will enable studies of MSN involvement in the stringent response with spatial and temporal control.



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