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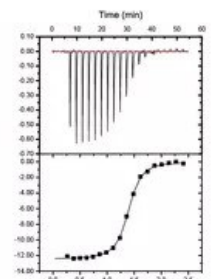
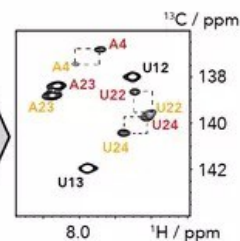
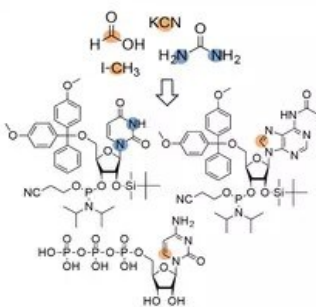
Insights into horizontal gene transfer in *Legionella pneumophila* by NMR spectroscopy

We use NMR to address the regulation of competence in *Legionella pneumophila*. In this organism competence is regulated by an RNA-protein complex involving the protein RocC, featuring an RNA binding domain, and the 66 nucleotide small bacterial RNA RocR. The RNA comprises a 6 nt recognition sequence to bind various mRNAs, thus the RNA-protein complex works as a translational inhibitor. A previously overlooked secondary/tertiary structure of RocR and the N-terminal region of RocC seem to be the key elements for the regulation mechanism. Our work towards the understanding of the molecular details of the regulation mechanism will be presented.

Nucleotide chemistry

RNA / DNA synthesis

biophysical studies
e.g. NMR, ITC



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