

# Exploring the conformational dynamics of a Ribozyme

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## Abstract

The function of Ribonucleic acid is not only storage and transfer of genetic information but can also be catalytic. One particular, synthetic RNA enzyme, is the Diels-Alder ribozyme. We will investigate here the conformational dynamics of the Diels-Alder ribozyme with particular emphasis on the flexibility of its tertiary fold. In addition to the known fully folded state, we will examine putative intermediate, partially folded, states. The impact of metal ion concentration on folding and flexibility of the ribozyme will be analyzed.