

Single Molecule Studies

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Single molecule micromanipulations have been applied to many enzymes mostly molecular motors working on DNA. We shall review what single molecule studies have brought for some of the enzymes. In particular we shall discuss the polymerases DNA which replicate DNA and RNA which translate the genetic message to messenger RNA. We shall discuss helicases, which separate the two DNA strands and translocases that travel along dsDNA. We shall also discuss how single molecule can be used to investigate in real time the binding of the galactose repressor on its DNA sequence.