



## Mechanistic Insights into Eukaryotic mRNA Polyadenylation

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Almost all eukaryotic mRNAs have a polyadenosine (PolyA) tail at their 3' end that is added co-transcriptionally by a multi-protein machinery known as the cleavage and polyadenylation factor (CPF). PolyA tails are essential for mRNA stability, efficient export of mRNAs from the nucleus to the cytoplasm and subsequently translation. Furthermore, addition and removal of polyA tails forms the basis of many post-transcriptional gene regulation events that are not completely understood yet. By means of in vitro reconstitution of a multi-protein complex, cryo-EM structure determination of the reconstituted complex and detailed biochemical analysis, we have gained novel insights into the mechanisms behind mRNA 3' end polyadenylation.