

Why mRNA Degradation matters

1. Regulation of gene expression beyond transcription
2. Maintenance of stable mRNA levels in the cell
3. Control of short-lived proteins (eg growth factors)
4. Recycling of nucleotides for reuse in new RNA synthesis

Deadenylation-dependent mRNA decay mechanism

Summary: shortening of the 3' polyA tail triggers the loss of protective proteins, which exposes the mRNA ends to degradation enzymes

