

세미나 초록

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발표 주제	Regulation of mRNA Stability
발표 내용	<p>It is important that eukaryotic genes be expressed at the right time and place, and at an appropriate level. Such tight gene regulation is achieved by multiple ways, typified by the regulation of mRNA stability. Several factors play an essential role in determining the fate of mRNA, including nucleotide sequences, trans-acting factors (mostly RNA-binding proteins), accessibility of RNA-degrading enzymes, status of RNA modifications, and translational capacity. In this talk, I will introduce several mRNA decay pathways involved in the quality or quantity control of mRNAs in eukaryotic cells. Furthermore, mRNA has recently come into focus as a therapeutic drug or vaccine. The biggest barrier to mRNA therapy is the intrinsic instability of mRNA within cells. Additionally, in vitro-transcribed mRNA is known to trigger the immune system when introduced into cells. Therefore, some perspectives and predictions for future research to overcome these limitations will also be discussed in this talk.</p>