

UPF3B Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP9653c

Specification

UPF3B Antibody (Center) Blocking Peptide - Product Information

Primary Accession

Q9BZI7

UPF3B Antibody (Center) Blocking Peptide - Additional Information

Gene ID 65109

Other Names

Regulator of nonsense transcripts 3B, Nonsense mRNA reducing factor 3B, Up-frameshift suppressor 3 homolog B, hUpf3B, Up-frameshift suppressor 3 homolog on chromosome X, hUpf3p-X, UPF3B, RENT3B, UPF3X

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

UPF3B Antibody (Center) Blocking Peptide - Protein Information

Name UPF3B (HGNC:20439)

Function

Involved in nonsense-mediated decay (NMD) of mRNAs containing premature stop codons by associating with the nuclear exon junction complex (EJC) and serving as link between the EJC core and NMD machinery. Recruits UPF2 at the cytoplasmic side of the nuclear envelope and the subsequent formation of an UPF1-UPF2-UPF3 surveillance complex (including UPF1 bound to release factors at the stalled ribosome) is believed to activate NMD. In cooperation with UPF2 stimulates both ATPase and RNA helicase activities of UPF1. Binds spliced mRNA upstream of exon-exon junctions. In vitro, stimulates translation; the function is independent of association with UPF2 and components of the EJC core.

Cellular Location

Nucleus. Cytoplasm Note=Shuttling between the nucleus and the cytoplasm

Tissue Location

Expressed in testis, uterus, prostate, heart, muscle, brain, spinal cord and placenta.



UPF3B Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

UPF3B Antibody (Center) Blocking Peptide - Images

UPF3B Antibody (Center) Blocking Peptide - Background

UPF3B is a protein that is part of a post-splicing multiprotein complex involved in both mRNA nuclear export and mRNA surveillance. This protein is one of two functional homologs to yeast Upf3p. mRNA surveillance detects exported mRNAs with truncated open reading frames and initiates nonsense-mediated mRNA decay (NMD). When translation ends upstream from the last exon-exon junction, this triggers NMD to degrade mRNAs containing premature stop codons. This protein binds to the mRNA and remains bound after nuclear export, acting as a nucleocytoplasmic shuttling protein. It forms with Y14 a complex that binds specifically 20 nt upstream of exon-exon junctions.

UPF3B Antibody (Center) Blocking Peptide - References

Chan, W.K., et al. Nat. Struct. Mol. Biol. 16(7):747-753(2009)Woeller, C.F., et al. EMBO Rep. 9(5):446-451(2008)Chamieh, H., et al. Nat. Struct. Mol. Biol. 15(1):85-93(2008)