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UPF3A Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP12579c

Specification

UPF3A Antibody (Center) Blocking peptide - Product Information

Primary Accession Q9H1J1

UPF3A Antibody (Center) Blocking peptide - Additional Information

Gene ID 65110

Other Names
Regulator of nonsense transcripts 3A, Nonsense mRNA reducing factor 3A, Up-frameshift suppressor 3 homolog A, hUpf3, UPF3A, RENT3A, UPF3

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.

UPF3A Antibody (Center) Blocking peptide - Protein Information

Name UPF3A

Synonyms RENT3A, UPF3

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. However, UPF3A is shown to be only marginally active in NMD as compared to UPF3B. Binds spliced mRNA upstream of exon-exon junctions. In vitro, weakly stimulates translation.

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

Tissue Location
Isoform 1 is strongly expressed in testis, uterus, muscle, fetal brain and spinal cord. Isoform 2 is strongly expressed in fetal brain and spinal cord.

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UPF3A Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

UPF3A Antibody (Center) Blocking peptide - Images

UPF3A Antibody (Center) Blocking peptide - Background

This gene encodes a protein that is part of apost-splicing multiprotein complex involved in both mRNA nuclearexport and mRNA surveillance. The encoded protein is one of twofunctional homologs to yeast Upf3p. mRNA surveillance detectsexported mRNAs with truncated open reading frames and initiatesnonsense-mediated mRNA decay (NMD). When translation ends upstreamfrom the last exon-exon junction, this triggers NMD to degrademRNAs containing premature stop codons. This protein binds to themRNA and remains bound after nuclear export, acting as anucleocytoplasmic shuttling protein. It forms with Y14 a complexthat binds specifically 20 nt upstream of exon-exon junctions. Thisgene is located on the long arm of chromosome 13. Two splicevariants encoding different isoforms have been found for this gene.

UPF3A Antibody (Center) Blocking peptide - References

Chan, W.K., et al. Nat. Struct. Mol. Biol. 16(7):747-753(2009)Singh, G., et al. Mol. Cell 27(5):780-792(2007)Tarpey, P.S., et al. Nat. Genet. 39(9):1127-1133(2007)Kunz, J.B., et al. RNA 12(6):1015-1022(2006)Lehner, B., et al. Genome Res. 14(7):1315-1323(2004)