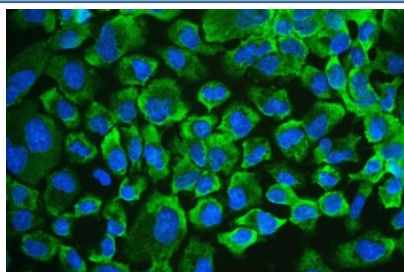


UPF1 Antibody / RENT1 (R32296)

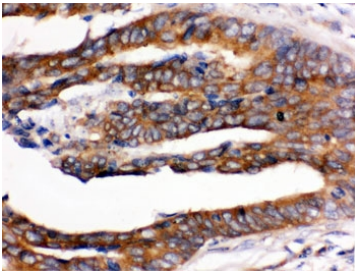
Catalog No.	Formulation	Size
R32296	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

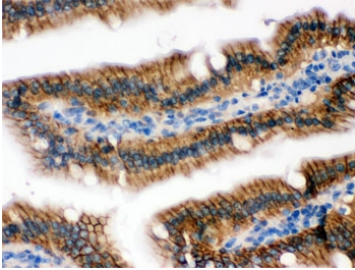
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q92900
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Immunofluorescence (FFPE) : 2-4ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This UPF1 antibody is available for research use only.



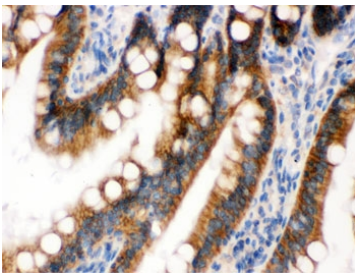
Immunofluorescent staining of FFPE human A431 cells with UPF1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



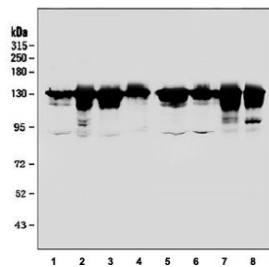
IHC testing of FFPE human intestinal cancer tissue with UPF1 antibody. HIER: Boil the paraffin sections in pH8 EDTA buffer for 20 minutes and allow to cool prior to staining.



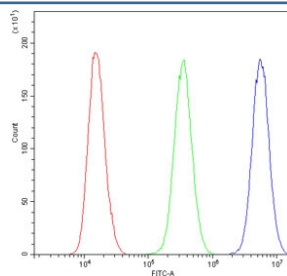
IHC testing of FFPE mouse intestine with UPF1 antibody. HIER: Boil the paraffin sections in pH8 EDTA buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE rat intestine with UPF1 antibody. HIER: Boil the paraffin sections in pH8 EDTA buffer for 20 minutes and allow to cool prior to staining.



Western blot testing of human 1) HeLa, 2) Raji, 3) HepG2, 4) SK-OV-3, 5) PC-3, 6) HEK293, 7) rat RH35 and 8) mouse HEPA1-6 cell lysate with UPF1 antibody. Predicted molecular weight ~124 kDa, but routinely observed at 130-140 kDa.



Flow cytometry testing of human PC-3 cells with UPF1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= UPF1 antibody.

Description

Regulator of nonsense transcripts 1 is a protein that in humans is encoded by the UPF1 gene. This gene encodes a protein that is part of a post-splicing multiprotein complex involved in both mRNA nuclear export and mRNA surveillance. 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. And this protein is located only in the cytoplasm. When translation ends, it interacts with the protein that is a functional homolog of yeast Upf2p to trigger mRNA decapping. Use of multiple polyadenylation sites has been noted for this gene. Alternative splicing results in multiple transcript variants.

Application Notes

Optimal dilution of the UPF1 antibody should be determined by the researcher.

Immunogen

Amino acids NMDSMPELQKLQQLKDETSELSSADEKRYRALKRT AE of human UPF1 were used as the immunogen for the UPF1 antibody.

Storage

After reconstitution, the UPF1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.