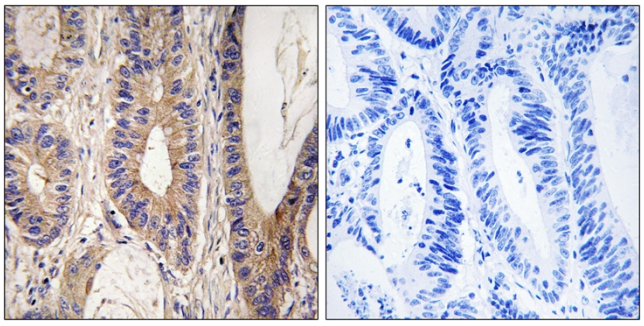
Rent1 Polyclonal Antibody

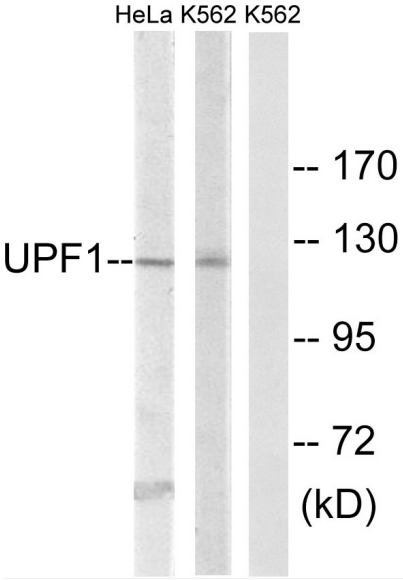
Catalog No	YP-Ab-01976
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	UPF1
Protein Name	Regulator of nonsense transcripts 1
Immunogen	The antiserum was produced against synthesized peptide derived from human UPF1. AA range:299-348
Specificity	Rent1 Polyclonal Antibody detects endogenous levels of Rent1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	UPF1; KIAA0221; RENT1; Regulator of nonsense transcripts 1; ATP-dependent helicase RENT1; Nonsense mRNA reducing factor 1; NORF1; Up-frameshift suppressor 1 homolog; hUpf1
Observed Band	110kD
Cell Pathway	Cytoplasm . Cytoplasm, P-body. Nucleus . Cytoplasm, perinuclear region . Hyperphosphorylated form is targeted to the P-body, while unphosphorylated protein is distributed throughout the cytoplasm. Localized in the chromatoid bodies of round spermatids (By similarity). .
Tissue Specificity	Ubiquitous.
Function	domain:The [ST]-Q motif constitutes a recognition sequence for kinases from the PI3/PI4-kinase family.,function:Part of a post-splicing multiprotein complex. Involved in nonsense-mediated decay (NMD) as part of the SMG1C complex, a mRNA surveillance complex that recognizes and degrades mRNAs containing premature translation termination codons (PTCs). The complex probably acts by associating with ribosomes during tranlation termination on mRNPs. If an exon junction complex (EJC) is located 50-55 or more nucleotides downstream from the termination codon, RENT1 is phosphorylated by SMG1, triggering nonsense-mediated decay (NMD). Essential for embryonic viability.,PTM:Phosphorylated by SMG1; required for formation of mRNA surveillance complexes. Phosphorylated upon DNA damage, probably by ATM or

	ATR.,similarity:Belongs to the DNA2/NAM7 helicase family.,similarity:Contains 1 C2H2-type zinc fi
Background	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. 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. [provided by RefSeq, Jul 2014],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue, using UPF1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from K562 and HeLa cells, using UPF1 Antibody. The lane on the right is blocked with the synthesized peptide.