

## Rabbit Anti-RENT1+hUPF1 antibody

## SL8565R

Product Name:	RENT1+hUPF1
Chinese Name:	ATP依赖解旋酶RENT1抗体
Alias:	ATP dependent helicase RENT1; ATP-dependent helicase RENT1; Delta helicase; HUPF 1; HUPF1; KIAA0221; Nonsense mRNA reducing factor 1; NORF 1; NORF1; pNORF 1; pNORF1; Regulator of nonsense transcripts 1; RENT 1; RENT1; RENT1_HUMAN; Smg 2; Smg 2 homolog nonsense mediated mRNA decay factor; UP Frameshift 1; Up frameshift mutation 1 homolog (S. cerevisiae); Up frameshift mutation 1 homolog; Up frameshift suppressor 1 homolog; Up-frameshift mutation 1 homolog (S. cerevisiae); Up-frameshift suppressor 1 homolog; UPF 1; UPF 1 regulator of nonsense transcripts homolog; UPF1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	124kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RENT1/hUPF1:301-450/1129
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

	In eukaryotes, it is essential to have the ability to detect and degrade transcripts that lack full coding potential. Nonsense-mediated RNA decay (NMD) protects the organism by avoiding the translation of truncated peptides with dominant negative or deleterious gain-of-function potential. Rent1, a mammalian ortholog of Upflp, is essential for embryonic viability (1–3). Rent1 (also designated regulator of nonsense transcripts and HUpf1) contains an N-terminal zinc finger-like domain, NTPase domains and a region comprised of domains that define Rent1 as a superfamily group I helicase.
	Plays a role in replication-dependent histone mRNA degradation at the end of phase S. 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.
	Subunit:
Product Detail:	Found in a post-splicing messenger ribonucleoprotein (mRNP) complex. Associates with the exon junction complex (EJC). Associates with the SGM1C complex; is phosphorylated by the complex kinase component SGM1. Interacts with UPF2, UPF3A and UPF3B. Interacts with EST1A and SLBP. Interacts (when hyperphosphorylated) with PNRC2. Interacts with EIF2C1, EIF2C2 and GSPT2.
	Subcellular Location:
	Cytoplasm. Cytoplasm, P-body. Note=Hyperphosphorylated form is targeted to the P- body, while unphosphorylated protein is distributed throughout the cytoplasm.
	Tissue Specificity:
	Ubiquitous.
	1 million and a million and
	<b>Post-translational modifications:</b> 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.
	Contains 1 C2H2-type zinc finger.
	SWISS: Q92900
	<b>Gene ID:</b> 5976



