

Datasheet for ABIN7167642

anti-RENT1/UPF1 antibody (AA 956-1125) (HRP)[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	RENT1/UPF1 (UPF1)
Binding Specificity:	AA 956-1125
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RENT1/UPF1 antibody is conjugated to HRP
Application:	ELISA

Product Details

Immunogen:	Recombinant Human Regulator of nonsense transcripts 1 protein (956-1125AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	RENT1/UPF1 (UPF1)
Alternative Name:	UPF1 (UPF1 Products)
Background:	Background: RNA-dependent helicase and ATPase required for nonsense-mediated decay (NMD) of mRNAs containing premature stop codons. Is recruited to mRNAs upon translation

termination and undergoes a cycle of phosphorylation and dephosphorylation, its phosphorylation appears to be a key step in NMD. Recruited by release factors to stalled ribosomes together with the SMG1C protein kinase complex to form the transient SURF (SMG1-UPF1-eRF1-eRF3) complex. In EJC-dependent NMD, the SURF complex associates with the exon junction complex (EJC) (located 50-55 or more nucleotides downstream from the termination codon) through UPF2 and allows the formation of an UPF1-UPF2-UPF3 surveillance complex which is believed to activate NMD. Phosphorylated UPF1 is recognized by EST1B/SMG5, SMG6 and SMG7 which are thought to provide a link to the mRNA degradation machinery involving exonucleolytic and endonucleolytic pathways, and to serve as adapters to protein phosphatase 2A (PP2A), thereby triggering UPF1 dephosphorylation and allowing the recycling of NMD factors. UPF1 can also activate NMD without UPF2 or UPF3, and in the absence of the NMD-enhancing downstream EJC indicative for alternative NMD pathways. Plays a role in replication-dependent histone mRNA degradation at the end of phase S, the function is independent of UPF2. For the recognition of premature termination codons (PTC) and initiation of NMD a competitive interaction between UPF1 and PABPC1 with the ribosome-bound release factors is proposed. The ATPase activity of UPF1 is required for disassembly of mRNPs undergoing NMD. Essential for embryonic viability.

Aliases: ATP dependent helicase RENT1 antibody, ATP-dependent helicase RENT1 antibody, Delta helicase antibody, FLJ43809 antibody, FLJ46894 antibody, HUPF 1 antibody, hUpf1 antibody, KIAA0221 antibody, Nonsense mRNA reducing factor 1 antibody, NORF 1 antibody, NORF1 antibody, pNORF 1 antibody, pNORF1 antibody, Regulator of nonsense transcripts 1 antibody, RENT 1 antibody, RENT1 antibody, RENT1_HUMAN antibody, Smg 2 antibody, Smg 2 homolog nonsense mediated mRNA decay factor antibody, UP Frameshift 1 antibody, Up frameshift mutation 1 homolog (S. cerevisiae) antibody, Up frameshift mutation 1 homolog antibody, Up frameshift suppressor 1 homolog antibody, Up-frameshift suppressor 1 homolog antibody, UPF 1 antibody, UPF 1 regulator of nonsense transcripts homolog antibody, upf1 antibody, UPF1 regulator of nonsense transcripts homolog antibody, UPF1 RNA helicase and ATPase antibody, Yeast Upf1p homolog antibody

UniProt: [Q92900](#)

Pathways: [SARS-CoV-2 Protein Interactome](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.