Immunotag™ UPF1 Antibody

Antibody Specification

Catalog No.	ITA6521
Product Description	Immunotag™ UPF1 Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	UPF1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC,IF/ICC,ELISA
Recommended Dilution	WB 1:500-1:2000 IHC 1:50-1:200, IF/ICC 1:100-1:500
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthetic peptide of human UPF1
Specificity	UPF1 Antibody detects endogenous levels of total UPF1
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	UPF1
Accession No.	Q92900

Antibody Specification

Alternate Names	ATP dependent helicase RENT1; ATP-dependent helicase RENT1; Delta helicase; FLJ43809; FLJ46894; 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 suppressor 1 homolog; UPF 1; UPF 1 regulator of nonsense transcripts homolog; upf1; UPF1 regulator of nonsense transcripts homolog; UPF1 RNA helicase and ATPase; Yeast Upf1p homolog;
Description	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.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	123kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.