

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human RENT1/UPF1 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human RENT1/UPF1 Asp351-Arg600 Accession # NP_002902
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

UPF1 (Up-frameshift mutation-1; also RENT1, SMG-2 and NORF1) is a 125-130 kDa member of the DNA2/NAM7 helicase family of molecules. It is ubiquitously expressed, and promotes the turnover of mRNA containing premature stop codons. UPF1 is a cytoplasmic factor that contributes to the formation of a UPF complex. During the translation of properly transcribed mRNA, unphosphorylated UPF1 is blocked from interacting with eRF3, a translation initiation factor. In the presence of an improper stop codon, a detection complex termed EJC initiates phosphorylation of UPF1, allowing it to bind to eRF3 and repress translation. Human UPF1 is 1129 amino acids (aa) in length. It contains one C2H2-type Zn finger motif (aa 131-159), an NTPase domain (aa 486-545) and three phosphorylation sites at Ser1107/1127/1129. There are two potential isoforms that show deletions of aa 54-58 and 353-363, respectively. Over aa 351-600, human UPF1 shares 99% aa identity with mouse UPF1.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.