

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human FAT10 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human Ubiquitin is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human FAT10 Met1-Gln165 (Cys160Ser) Accession # O15205
<b>Conjugate</b>	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
<b>Formulation</b>	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

Human Leukocyte Antigen-F Associated Transcript 10 (FAT10), also known as Ubiquitin D (UBD), is a 165 amino acid (aa) member of the Ubiquitin-like family of proteins. Human FAT10 has a predicted molecular weight of 18.5 kDa and shares 69% aa sequence identity with mouse FAT10. Human FAT10 mRNA is expressed as a single transcript in lymphoblastoid lines and dendritic cells, but more than one mRNA transcript has been identified for murine FAT10. FAT10 can also be induced by IFN-γ and TNF-α in some cell lines. Structurally, FAT10 consists of two Ubiquitin-like domains that are connected by a short linker. Like Ubiquitin, FAT10 has a C-terminal glycine residue that can be used to form isopeptide bonds with target proteins. FAT10 conjugated proteins are targeted to the proteasome where the 26S Proteasome subunit S5a/Angioidin binds to FAT10 and enables subsequent degradation of the conjugated protein. In addition to S5a/Angioidin, FAT10 has been shown to interact with Huntingtin, Ataxin-1, MAD2, and NUB1L. FAT10 has been implicated in a number of biological processes such as cell cycle control, antigen presentation, and cytokine response.

## 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.