

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FAT10 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human Ubiquitin is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human FAT10 Met1-Gln165 (Cys160Ser) Accession # O15205
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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

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.

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