

#### 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<br>Met1-Gln165 (Cys160Ser)<br>Accession # O15205                                                                                                                                                                            |
| <b>Conjugate</b>          | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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

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