

# FAT10 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11316b

#### **Product Information**

**Application** WB, IHC-P, IF, E

Primary Accession <u>015205</u>

Other Accession AAD52982, NP\_006389.2
Reactivity Human, Rat, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB11812
Calculated MW 18473
Antigen Region 120-153

### **Additional Information**

**Gene ID** 10537

Other Names Ubiquitin D, Diubiquitin, Ubiquitin-like protein FAT10, UBD, FAT10

Target/Specificity This FAT10 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 120-153 amino acids from the

C-terminal region of human FAT10.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent

concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** FAT10 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **Protein Information**

Name UBD

Synonyms FAT10

Function Ubiquitin-like protein modifier which can be covalently attached to target

proteins and subsequently leads to their degradation by the 26S proteasome, in a NUB1-dependent manner (PubMed: 15831455, PubMed: 16707496, PubMed: 19166848). Conjugation to the target protein is activated by UBA6 via adenylation of its C-terminal glycine (PubMed:17889673, PubMed:35970836). Promotes the expression of the proteasome subunit beta type-9 (PSMB9/LMP2). Regulates TNF-alpha- induced and LPS-mediated activation of the central mediator of innate immunity NF-kappa-B by promoting TNF-alpha-mediated proteasomal degradation of ubiquitinated-I-kappa-B-alpha (PubMed: 19959714). Required for TNF-alpha-induced p65 nuclear translocation in renal tubular epithelial cells (RTECs). May be involved in dendritic cell (DC) maturation, the process by which immature dendritic cells differentiate into fully competent antigen-presenting cells that initiate T-cell responses (PubMed: 19028597). Mediates mitotic non- disjunction and chromosome instability, in long-term in vitro culture and cancers, by abbreviating mitotic phase and impairing the kinetochore localization of MAD2L1 during the prometaphase stage of the cell cycle (PubMed:16495226). May be involved in the formation of aggresomes when proteasome is saturated or impaired (PubMed: 19033385). Mediates apoptosis in a caspase-dependent manner, especially in renal epithelium and tubular cells during renal diseases such as polycystic kidney disease and Human immunodeficiency virus (HIV)-associated nephropathy (HIVAN) (PubMed:16495380).

**Cellular Location** 

Nucleus. Cytoplasm {ECO:0000250 | UniProtKB:P63072} Note=Accumulates in aggresomes under proteasome inhibition conditions

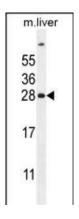
**Tissue Location** 

Constitutively expressed in mature dendritic cells and B-cells. Mostly expressed in the reticuloendothelial system (e.g thymus, spleen), the gastrointestinal system, kidney, lung and prostate gland.

#### References

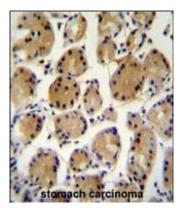
Ucisik-Akkaya, E., et al. Mol. Hum. Reprod. 16(10):770-777(2010) Frank, B., et al. Int. J. Cancer (2010) In press: Gong, P., et al. J. Am. Soc. Nephrol. 21(2):316-326(2010) Castellanos-Rubio, A., et al. Hum. Immunol. 71(1):96-99(2010) Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009):

## **Images**

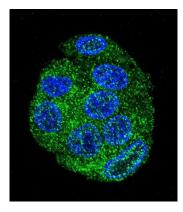


FAT10 Antibody (C-term) (Cat. #AP11316b) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the hFAT10 antibody detected the hFAT10 protein (arrow).

FAT10 Antibody (C-term) (Cat. #AP11316b)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach carcinoma followed by peroxidase conjugation of the secondary



antibody and DAB staining. This data demonstrates the use of FAT10 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of FAT10 Antibody (C-term)(Cat#AP11316b) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.