

FAT10 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11316b

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	O15205
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-induced and LPS-mediated activation of the central mediator of innate immunity NF- kappa-B by promoting TNF-mediated proteasomal degradation of ubiquitinated-I-kappa-B-alpha (PubMed:[19959714](#)). Required for TNF- 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

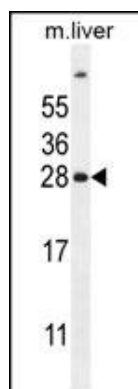
Tissue Location

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

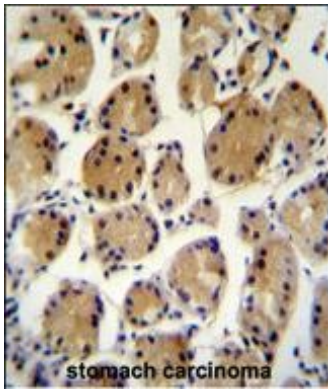
- Ucisik-Akkaya, E., et al. Mol. Hum. Reprod. 16(10):770-777(2010)
Frank, B., et al. Int. J. Cancer (2010) In press :
Gong, P., et al. J. Am. Soc. Nephrol. 21(2):316-326(2010)
Castellanos-Rubio, A., et al. Hum. Immunol. 71(1):96-99(2010)
Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009) :

Images

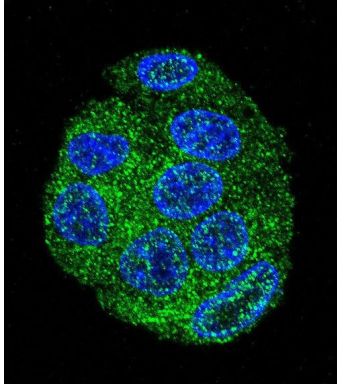


FAT10 Antibody (C-term) (Cat. #AP11316b) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the hFAT10 antibody detected the hFAT10 protein (arrow).

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'.