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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

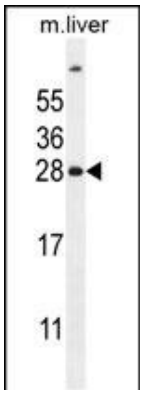
Tissue Location

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

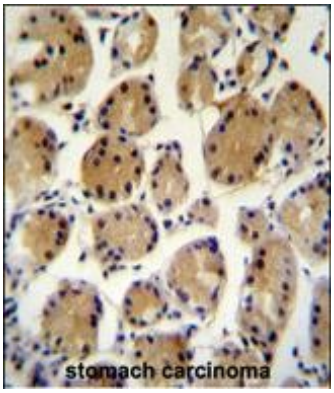
Ucisik-Akkaya, E., et al. Mol. Hum. Reprod. 16(10):770-777(2010)
Frank, B., et al. Int. J. Cancer (2010) In press :
Gong, P., et al. J. Am. Soc. Nephrol. 21(2):316-326(2010)
Castellanos-Rubio, A., et al. Hum. Immunol. 71(1):96-99(2010)
Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009) :

Images

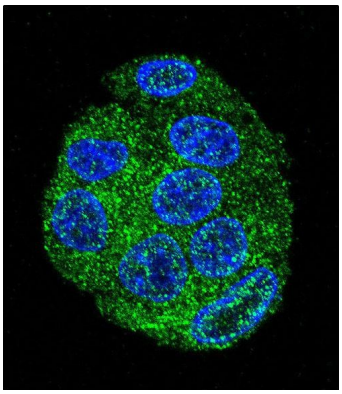


FAT10 Antibody (C-term) (Cat. #AP11316b) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the hFAT10 antibody detected the hFAT10 protein (arrow).

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 lgG (green). DAPI was used to stain the cell nuclear (blue).