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Ubiquitin D Antibody

Rabbit mAb
Catalog # AP90928

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	O15205
Reactivity	Human, Mouse
Clonality	Monoclonal
Other Names	FAT10; UBD-3; GABBR1; UBD; Ubiquitin D;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	18473

Additional Information

Dilution	WB 1:500~1:1000 IHC 1:50~1:200 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Ubiquitin D
Description	UBD (ubiquitin D) is a protein-coding gene. Diseases associated with UBD include nephrosclerosis, and severe acute respiratory syndrome, and among its related super-pathways are NF-KappaB Family Pathway and MIF Regulation of Innate Immune Cells. GO annotations related to this gene include proteasome binding and protein binding. An important paralog of this gene is ISG15.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

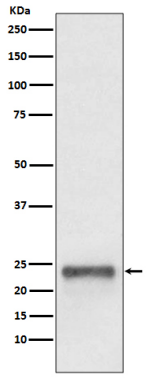
Cellular Location

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.

Images



Western blot analysis of Ubiquitin D expression in HepG2 cell lysate.