

Ubiquitin D Rabbit mAb

Catalog # AP79030

Product Information

Application WB, IHC-P, IF, ICC

Primary Accession <u>015205</u>

Reactivity Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human Ubiquitin D

Purification Affinity Chromatography

Calculated MW 18473

Additional Information

Gene ID 10537

Other Names UBD

Dilution WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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:<u>19959714</u>). 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).

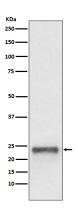
Cellular Location

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





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