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Anti-Diubiquitin Antibody

Catalog # ABO11532

Product Information

Application	WB, IHC-P
Primary Accession	O15205
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Ubiquitin D(UBD) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	10537
Other Names	Ubiquitin D, Diubiquitin, Ubiquitin-like protein FAT10, UBD, FAT10
Calculated MW	18473
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Nucleus . Cytoplasm . Accumulates in aggresomes under proteasome inhibition conditions.
Tissue Specificity	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. .
Source	Eukaryota
Protein Name	Ubiquitin D
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Diubiquitin(27-40aa YDSVKKIKEHVRSK), different from the related mouse and rat sequences by five amino acids.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Contains 2 ubiquitin-like domains.

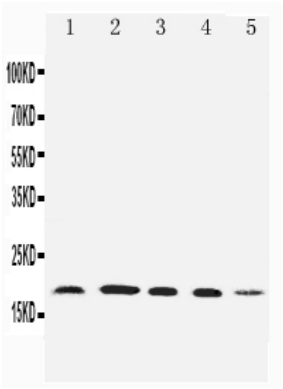
Protein Information

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.

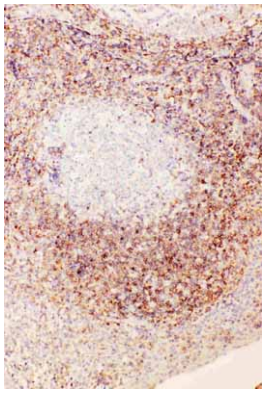
Background

Ubiquitin D, also called UBD or FAT10 is a protein that in humans is encoded by the UBD gene. This gene is mapped to 6p22.1. Ubiquitin-like protein modifier can be covalently attached to target protein and subsequently leads to their degradation by the 26S proteasome in a NUB1L-dependent manner. This gene 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. It may be involved in the formation of aggresomes when proteasome is saturated or impaired. This gene 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). It probably functions as a survival factor.

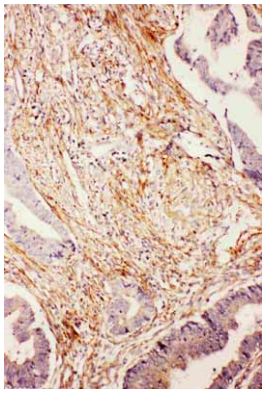
Images



Anti-Diubiquitin antibody, ABO11532, Western blottingLane 1: HELA Cell LysateLane 2: SKOV Cell LysateLane 3: MCF-7 Cell LysateLane 4: A549 Cell LysateLane 5: SMMC Cell Lysate



Anti-Diubiquitin antibody, ABO11532, IHC(P)IHC(P): Human Tonsil Tissue



Anti-Diubiquitin antibody, ABO11532, IHC(P)IHC(P): Human Intestinal Cancer Tissue

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