

Anti-Diubiquitin Antibody
Catalog # ABO11532**Specification**

Anti-Diubiquitin Antibody - Product Information

Application	WB, IHC
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.

Anti-Diubiquitin Antibody - Additional Information

Gene ID 10537

Other Names

Ubiquitin D, Diubiquitin, Ubiquitin-like protein FAT10, UBD, FAT10

Calculated MW

18473 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/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. .

Protein Name

Ubiquitin D

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthctic 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 reconstitution, 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.

Anti-Diubiquitin Antibody - Protein Information

Name UBD

Synonyms FAT10

Function

Ubiquitin-like protein modifier which can be covalently attached to target protein and subsequently leads to their degradation by the 26S proteasome, in a NUB1-dependent manner. Probably functions as a survival factor. Conjugation ability activated by UBA6. 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. 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. 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. May be involved in the formation of aggresomes when proteasome is saturated or impaired. 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).

Cellular Location

Nucleus. Cytoplasm. 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.

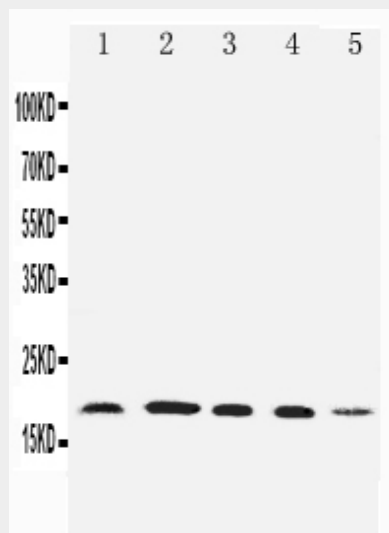
Anti-Diubiquitin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

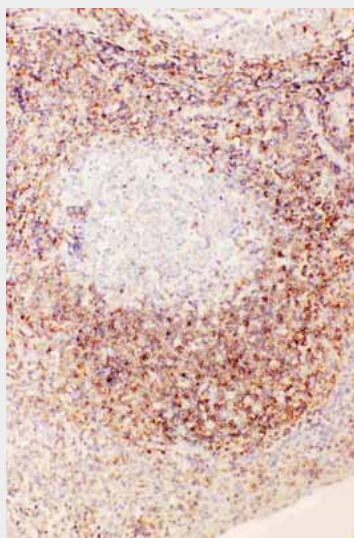
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

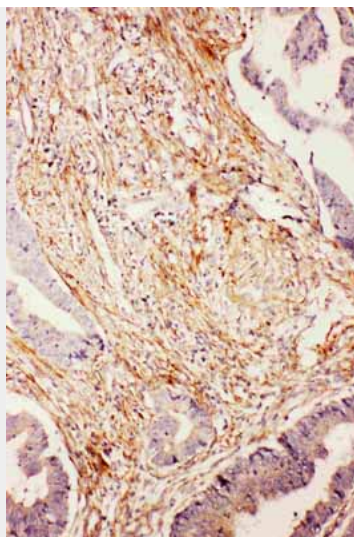
Anti-Diubiquitin Antibody - Images



Anti-Diubiquitin antibody, ABO11532, Western blotting
Lane 1: HELA Cell Lysate
Lane 2: SKOV Cell Lysate
Lane 3: MCF-7 Cell Lysate
Lane 4: A549 Cell Lysate
Lane 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

Anti-Diubiquitin Antibody - 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.