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OTUB1 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21558b

Specification

OTUB1 Antibody (C-Term) - Product Information

Application	**WB,E**
Primary Accession	Q96FW1
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**31284**

OTUB1 Antibody (C-Term) - Additional Information

Gene ID 55611

Other Names
Ubiquitin thioesterase OTUB1, Deubiquitinating enzyme OTUB1, OTU domain-containing ubiquitin aldehyde-binding protein 1, Otubain-1, hOTU1, Ubiquitin-specific-processing protease OTUB1, OTUB1, OTB1, OTU1

Target/Specificity
This OTUB1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 185-219 amino acids from human OTUB1.

Dilution
WB~~1:1000-1:2000
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
OTUB1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

OTUB1 Antibody (C-Term) - Protein Information

Name OTUB1

Synonyms OTB1, OTU1

Function Hydrolase that can specifically remove 'Lys-48'-linked conjugated ubiquitin from proteins and plays an important regulatory role at the level of protein turnover by preventing degradation (PubMed:12401499, PubMed:12704427, PubMed:14661020, PubMed:23827681). Regulator of T-cell anergy, a phenomenon that occurs when T-cells are rendered unresponsive to antigen rechallenge and no longer respond to their cognate antigen (PubMed:14661020). Acts via its interaction with RNF128/GRAIL, a crucial inductor of CD4 T-cell anergy (PubMed:14661020). Isoform 1 destabilizes RNF128, leading to prevent anergy (PubMed:14661020). In contrast, isoform 2 stabilizes RNF128 and promotes anergy (PubMed:14661020). Surprisingly, it regulates RNF128-mediated ubiquitination, but does not deubiquitinate polyubiquitinated RNF128 (PubMed:14661020). Deubiquitinates estrogen receptor alpha (ESR1) (PubMed:19383985). Mediates deubiquitination of 'Lys-48'-linked polyubiquitin chains, but not 'Lys-63'-linked polyubiquitin chains (PubMed:18954305, PubMed:19211026, PubMed:23827681). Not able to cleave di-ubiquitin (PubMed:18954305, PubMed:23827681). Also capable of removing NEDD8 from NEDD8 conjugates, but with a much lower preference compared to 'Lys-48'-linked ubiquitin (PubMed:18954305, PubMed:23827681).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:B2RYG6}.

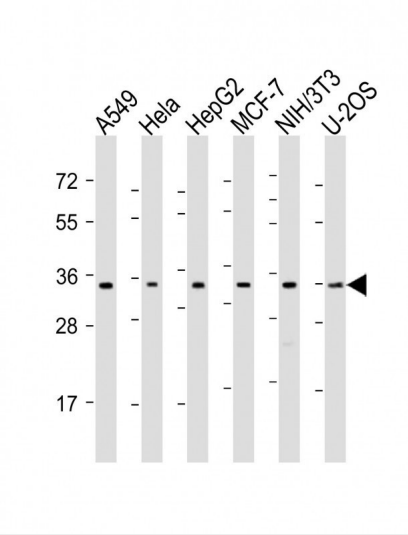
Tissue Location
Isoform 1 is ubiquitous. Isoform 2 is expressed only in lymphoid tissues such as tonsils, lymph nodes and spleen, as well as peripheral blood mononuclear cells

OTUB1 Antibody (C-Term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

OTUB1 Antibody (C-Term) - Images



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All lanes : Anti-OTUB1 Antibody (C-Term) at 1:1000-1:2000 dilution Lane 1: A549 whole cell lysates Lane 2: Hela whole cell lysates Lane 3: HepG2 whole cell lysates Lane 4: MCF-7 whole cell lysates Lane 5: NIH/3T3 whole cell lysates Lane 6: U-2OS whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

OTUB1 Antibody (C-Term) - Background

Hydrolase that can specifically remove 'Lys-48'-linked conjugated ubiquitin from proteins and plays an important regulatory role at the level of protein turnover by preventing degradation. Regulator of T-cell anergy, a phenomenon that occurs when T-cells are rendered unresponsive to antigen rechallenge and no longer respond to their cognate antigen. Acts via its interaction with RNF128/GRAIL, a crucial inductor of CD4 T-cell anergy. Isoform 1 destabilizes RNF128, leading to prevent anergy. In contrast, isoform 2 stabilizes RNF128 and promotes anergy. Surprisingly, it regulates RNF128-mediated ubiquitination, but does not deubiquitinate polyubiquitinated RNF128. Deubiquitinates estrogen receptor alpha (ESR1). Mediates deubiquitination of 'Lys- 48'-linked polyubiquitin chains, but not 'Lys-63'-linked polyubiquitin chains. Not able to cleave di-ubiquitin. Also capable of removing NEDD8 from NEDD8 conjugates, but with a much lower preference compared to 'Lys-48'-linked ubiquitin.

OTUB1 Antibody (C-Term) - References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
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