

Anti-OTUB1 (pS187) Antibody

Rabbit polyclonal antibody to OTUB1 (pS187) Catalog # AP60926

Product Information

Application WB
Primary Accession Q96FW1
Other Accession Q7TOI3

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 31284

Additional Information

Gene ID 55611

Other Names OTB1; OTU1; Ubiquitin thioesterase OTUB1; Deubiquitinating enzyme OTUB1;

OTU domain-containing ubiquitin aldehyde-binding protein 1; Otubain-1;

hOTU1; Ubiquitin-specific-processing protease OTUB1

Target/Specificity Recognizes endogenous levels of OTUB1 (pS187) protein.

Dilution WB~~WB (1/500 - 1/1000)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

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}.

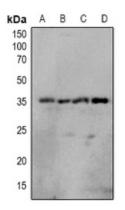
Tissue Location

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

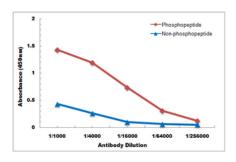
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human OTUB1. The exact sequence is proprietary.

Images



Western blot analysis of OTUB1 (pS187) expression in Hela (A), Jurkat (B), NIH3T3 (C), mouse brain (D) whole cell lysates.



Direct ELISA antibody dose-response curve using Anti-OTUB1 (pS187) Antibody. Antigen (phosphopeptide and non-phosphopeptide) concentration is 5 ug/ml. Goat Anti-Rabbit IgG (H&L) - HRP was used as the secondary antibody, and signal was developed by TMB substrate.

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