

KD-Validated Anti-OTUB1 Mouse Monoclonal Antibody
Mouse monoclonal antibody
Catalog # AGI1941**Specification****KD-Validated Anti-OTUB1 Mouse Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	Q96FW1
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2b
Calculated MW	Predicted, 31 kDa, observed, 35 kDa kDa
Gene Name	OTUB1
Aliases	OTUB1; OTU Deubiquitinase, Ubiquitin Aldehyde Binding 1; OTU Domain-Containing Ubiquitin Aldehyde-Binding Protein 1; Ubiquitin-Specific-Processing Protease OTUB1; OTU Domain, Ubiquitin Aldehyde Binding 1; Deubiquitinating Enzyme OTUB1; Ubiquitin Thioesterase OTUB1; Otubain-1; FLJ20113; FLJ40710; OTB1; OTU1; Ubiquitin-Specific Protease Otubain 1; OTU-Domain Ubal-Binding 1; EC 3.4.19.12; EC 3.1.2; HSPC263; HOTU1
Immunogen	Recombinant protein of human OTUB1

KD-Validated Anti-OTUB1 Mouse Monoclonal Antibody - Additional Information

Gene ID	55611
Other Names	Ubiquitin thioesterase OTUB1, 3.4.19.12, Deubiquitinating enzyme OTUB1, OTU domain-containing ubiquitin aldehyde-binding protein 1, Otubain-1, hOTU1, Ubiquitin-specific-processing protease OTUB1, OTUB1, OTB1, OTU1

KD-Validated Anti-OTUB1 Mouse Monoclonal Antibody - 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](http://www.uniprot.org/citations/12401499), PubMed: [12704427](http://www.uniprot.org/citations/12704427), PubMed: [14661020](http://www.uniprot.org/citations/14661020), PubMed: [23827681](http://www.uniprot.org/citations/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

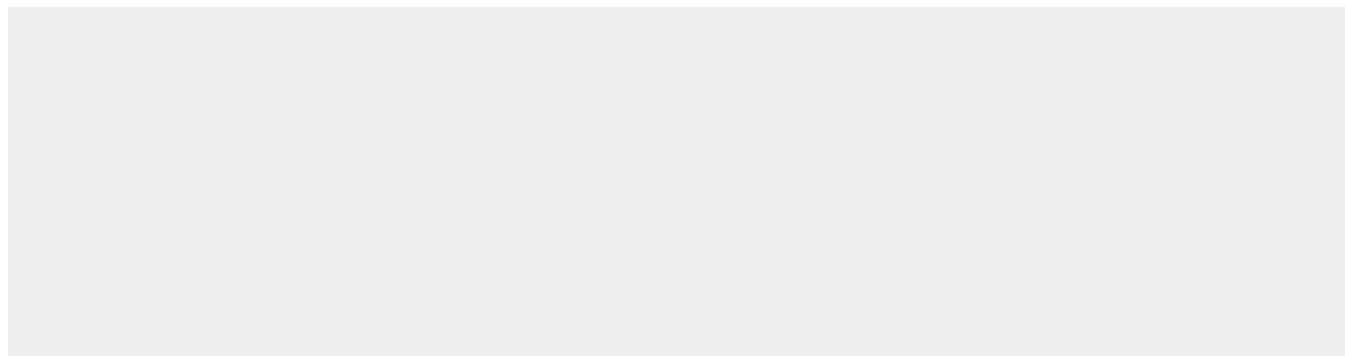
Isoform 1 is ubiquitous. Isoform 2 is expressed only in lymphoid tissues such as tonsils, lymph nodes and spleen, as well as peripheral blood mononuclear cells

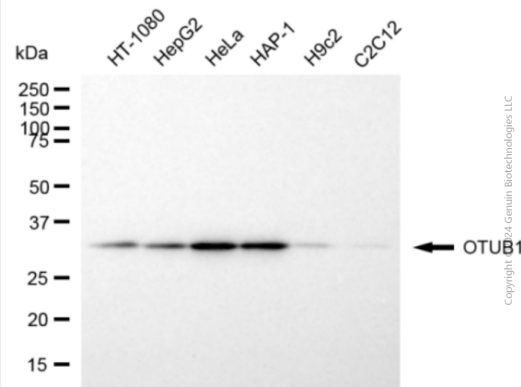
KD-Validated Anti-OTUB1 Mouse Monoclonal Antibody - Protocols

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

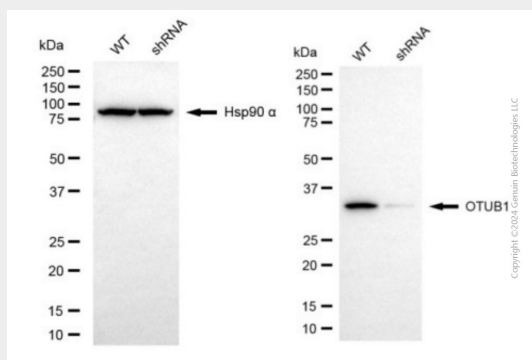
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-OTUB1 Mouse Monoclonal Antibody - Images





Western blotting analysis using anti-OTUB1 antibody (Cat#AGI1941). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-OTUB1 antibody (Cat#AGI1941, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-OTUB1 antibody (Cat#AGI1941). OTUB1 expression in wild type (WT) and OTUB1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-OTUB1 antibody (Cat#AGI1941, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.