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OTUD4 Antibody

Catalog # ASC10867

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q01804
Other Accession	NP_001096123, 156630992
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	124045
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	OTUD4 antibody can be used for detection of OTUD4 by Western blot at 0.25 - 0.5 g/mL. Antibody can also be used for immunocytochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	54726
Other Names	OTU domain-containing protein 4, 3.4.19.12, HIV-1-induced protein HIN-1, OTUD4, HIN1, KIAA1046
Target/Specificity	OTUD4; Multiple isoforms of OTUD4 are known to exist. OTUD4 antibody is predicted to not cross-react with other members of the OTUD family.
Reconstitution & Storage	OTUD4 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	OTUD4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	OTUD4 (HGNC:24949)
Function	Deubiquitinase which hydrolyzes the isopeptide bond between the ubiquitin C-terminus and the lysine epsilon-amino group of the target protein (PubMed:23827681, PubMed:25944111, PubMed:29395066). May negatively regulate inflammatory and pathogen recognition signaling in innate immune response. Upon phosphorylation at Ser-202 and Ser-204 residues, via IL-1 receptor and Toll-like receptor signaling pathway, specifically deubiquitinates 'Lys-63'-polyubiquitinated MYD88 adapter protein triggering down-regulation of NF-kappa-B-dependent transcription of inflammatory mediators

(PubMed:29395066). Independently of the catalytic activity, acts as a scaffold for alternative deubiquitinases to assemble specific deubiquitinase- substrate complexes. Associates with USP7 and USP9X deubiquitinases to stabilize alkylation repair enzyme ALKBH3, thereby promoting the repair of alkylated DNA lesions (PubMed:25944111).

Cellular Location Cytoplasm. Nucleus. Note=Primarily cytoplasmic

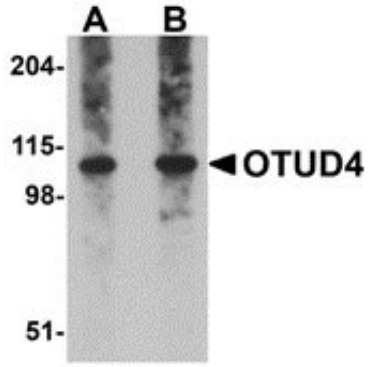
Background

OTUD4 Antibody: OTUD4, also known as HIV-1 induced protein HIN-1, is a member of the OTU (ovarian tumor) domain containing cysteine protease superfamily, in which the OUT domain generally confers deubiquitinase activity. At least three isoforms of OTUD4 are known to exist, and the smallest of these isoforms are only expressed in HIV-1-infected cells (provided by RefSeq).

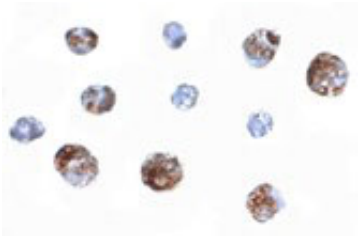
References

Borodovsky A, Ovaa H, Kolli N, et al. Chemistry-based functional genomics reveals novel members of the deubiquitinating enzyme family. Chem. Biol. 2002; 10:1149-59.

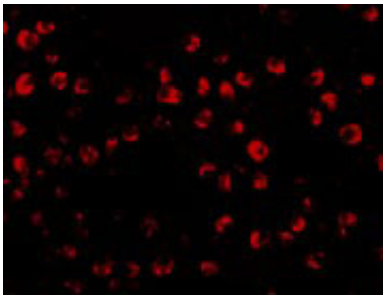
Images



Western blot analysis of OTUD4 in Daudi cell lysate with OTUD4 antibody at (A) 0.25 and (B) 0.5 µg/mL.



Immunocytochemistry of OTUD4 in Daudi cells with OTUD4 antibody at 2.5 µg/mL.



Immunofluorescence of OTUD4 in Daudi cells with OTUD4 antibody at 20 µg/mL.