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OTUD3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11031C

Product Information

Application	IHC-P-Leica, WB, E
Primary Accession	Q5T2D3
Other Accession	NP_056022.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28198
Calculated MW	45124
Antigen Region	192-220

Additional Information

Gene ID	23252
Other Names	OTU domain-containing protein 3, OTUD3, KIAA0459
Target/Specificity	This OTUD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 192-220 amino acids from the Central region of human OTUD3.
Dilution	IHC-P-Leica~~1:500 WB~~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	OTUD3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	OTUD3 (HGNC:29038)
Function	Deubiquitinating enzyme that hydrolyzes 'Lys-6'- and 'Lys- 11'-linked polyubiquitin. Also hydrolyzes heterotypic (mixed and branched) and homotypic chains (PubMed:23827681, PubMed:32011234,

PubMed:35675826). Important regulator of energy metabolism (PubMed:35675826). Glucose and fatty acids trigger its nuclear translocation by CBP-dependent acetylation (PubMed:35675826). In the nucleus, deubiquitinates and stabilizes the nuclear receptor PPARD regulating the expression of various genes involved in glucose and lipid metabolism and oxidative phosphorylation (PubMed:35675826). Also acts as a negative regulator of the ribosome quality control (RQC) by mediating deubiquitination of 40S ribosomal proteins RPS10/eS10 and RPS20/uS10, thereby antagonizing ZNF598-mediated 40S ubiquitination (PubMed:32011234).

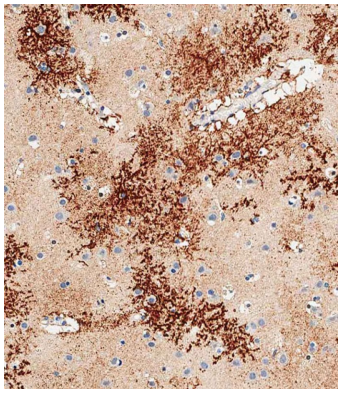
Cellular Location

Cytoplasm. Nucleus. Note=Glucose or fatty acid promote nuclear translocation upon acetylation.

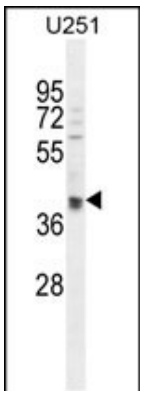
References

McGovern, D.P., et al. Nat. Genet. 42(4):332-337(2010)
Franke, A., et al. Nat. Genet. 42(4):292-294(2010)
Barrett, J.C., et al. Nat. Genet. 41(12):1330-1334(2009)
Silverberg, M.S., et al. Nat. Genet. 41(2):216-220(2009)
Venter, J.C., et al. Science 291(5507):1304-1351(2001)

Images



Immunohistochemical analysis of paraffin-embedded human brain tissue using AP11031C performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



OTUD3 Antibody (Center) (Cat. #AP11031c) western blot analysis in U251 cell line lysates (35ug/lane).This demonstrates the OTUD3 antibody detected the OTUD3 protein (arrow).