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UCH37 (UCHL5) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2128a

Product Information

Application	WB, IHC-F, E
Primary Accession	Q9Y5K5
Other Accession	Q06AT3, Q9XSJ0
Reactivity	Human, Mouse
Predicted	Pig, Bovine, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB4190
Calculated MW	37607
Antigen Region	56-87

Additional Information

Gene ID	51377
Other Names	Ubiquitin carboxyl-terminal hydrolase isozyme L5, UCH-L5, Ubiquitin C-terminal hydrolase UCH37, Ubiquitin thioesterase L5, UCHL5, UCH37
Target/Specificity	This UCH37 (UCHL5) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 56-87 amino acids from the N-terminal region of human UCH37 (UCHL5).
Dilution	WB~~1:1000 IHC-F~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	UCH37 (UCHL5) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	UCHL5
Synonyms	UCH37

Function	Protease that specifically cleaves 'Lys-48'-linked polyubiquitin chains. Deubiquitinating enzyme associated with the 19S regulatory subunit of the 26S proteasome. Putative regulatory component of the INO80 complex; however is inactive in the INO80 complex and is activated by a transient interaction of the INO80 complex with the proteasome via ADRM1.
Cellular Location	Cytoplasm. Nucleus. Note=Associates with the proteasome 19S subunit in the cytoplasm. Associates with the INO80 complex in the nucleus

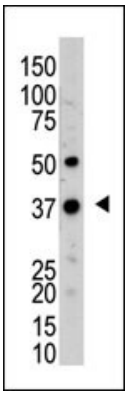
Background

Covalent attachment of the C-terminus of ubiquitin to cellular proteins plays a role in a variety of cellular processes. Ubiquitin C-terminal hydrolysis is catalyzed by deubiquitinating (DUB) enzymes and is necessary for several functions, including liberation of monomeric ubiquitin from the precursors encoded by ubiquitin genes and recycling of ubiquitin monomers. There are 2 distinct families of DUBs, ubiquitin-specific proteases (UBPs) and ubiquitin C-terminal hydrolases (UCHs). Mayer and Wilkinson (1989) identified 4 distinct UCH activities from bovine thymus. All 4 were thiol proteases and had high-affinity binding sites for ubiquitin. Wilkinson et al. (1989) purified the predominant isozyme, UCHL3, and raised antibodies against it. By screening a human B-cell expression library with the antibodies, the authors isolated cDNAs encoding human UCHL3. Sequence comparisons revealed that the sequence of the predicted 230-amino acid human UCHL3 protein is 54% identical to that of UCHL1.

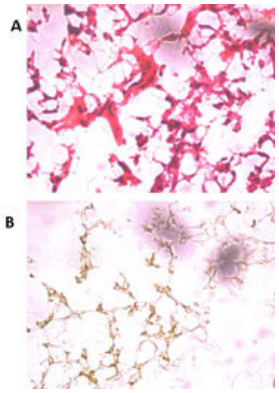
References

M-P. et al. Proteomics. July; 9(13): 3609?622(2009).
Hu, R.M., et al., Proc. Natl. Acad. Sci. U.S.A. 97(17):9543-9548 (2000).
Lai, C.H., et al., Genome Res. 10(5):703-713 (2000).

Images



The anti-UCHL5 Pab (Cat. #AP2128a) is used in Western blot to detect UCHL5 in mouse kidney tissue lysate.



HE staining of frozen human ovarian cancer tissue reacted with the primary antibody at a 1:250 dilution. Levels using the antibody on frozen tissue array (A)correlated well with the mRNA expression levels detected by Agilent expression microarray (B). This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. 60X magnification. Data courtesy of Marlena Fejzo, University of California, Los Angeles.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.