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UCHL3 Antibody

Rabbit mAb
Catalog # AP90294

Product Information

Application	WB
Primary Accession	P15374
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	UCH-L3; Ubiquitin thiolesterase L3; Ubiquitin carboxyl-terminal hydrolase isozyme L3;UCHL3;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	26183

Additional Information

Dilution	WB 1:1000~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human UCHL3
Description	Deubiquitinating enzyme (DUB) that controls levels of cellular ubiquitin through processing of ubiquitin precursors and ubiquitinated proteins. Thiol protease that recognizes and hydrolyzes a peptide bond at the C-terminal glycine of either ubiquitin or NEDD8. Has a 10-fold preference for Arg and Lys at position P3", and exhibits a preference towards 'Lys-48'-linked Ubiquitin chains. Deubiquitinates ENAC in apical compartments, thereby regulating apical membrane recycling.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

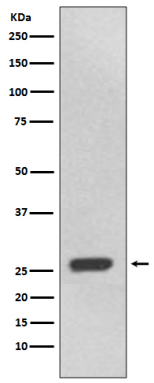
Name	UCHL3 {ECO:0000303|PubMed:19047059, ECO:0000312|HGNC:HGNC:12515}
Function	Deubiquitinating enzyme (DUB) that controls levels of cellular ubiquitin through processing of ubiquitin precursors and ubiquitinated proteins (PubMed:19154770, PubMed:21762696, PubMed:22689415, PubMed:2530630). Thiol protease that recognizes and hydrolyzes a peptide bond at the C-terminal glycine of either ubiquitin or NEDD8 (PubMed:19154770, PubMed:21762696, PubMed:22689415, PubMed:2530630, PubMed:9790970). Has a 10-fold preference for Arg and Lys at position P3'', and exhibits a preference towards 'Lys-48'-linked ubiquitin chains (PubMed:19154770, PubMed:21762696, PubMed:22689415, PubMed:2530630). Can hydrolyze UBB(+1), a mutated form of ubiquitin which

is not effectively degraded by the proteasome and is associated with neurodegenerative disorders (By similarity). Involved in DNA repair via homologous recombination (HR) by mediating deubiquitination of RAD51 in response to DNA damage, promoting interaction between RAD51 and BRCA2 (PubMed:27941124). Deubiquitinates ENAC in apical compartments, thereby regulating apical membrane recycling (By similarity). Indirectly increases the phosphorylation of IGFIR, AKT and FOXO1 and promotes insulin-signaling and insulin-induced adipogenesis (By similarity). Required for stress-response retinal, skeletal muscle and germ cell maintenance (By similarity). May be involved in working memory (By similarity).

Cellular Location Cytoplasm.

Tissue Location Highly expressed in heart, skeletal muscle, and testis.

Images



Western blot analysis of UCHL3 expression in 293T cell lysate.

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