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Anti-UCHL3 Rabbit Monoclonal Antibody

Catalog # ABO16086

Product Information

Application	WB, IHC
Primary Accession	P15374
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-UCHL3 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	7347
Other Names	Ubiquitin carboxyl-terminal hydrolase isozyme L3, UCH-L3, 3.4.19.12, Ubiquitin thioesterase L3, UCHL3
Calculated MW	26183
Application Details	WB 1:500-1:2000 IHC 1:50-1:200
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 26U65
Immunogen	A synthesized peptide derived from UCHL3
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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

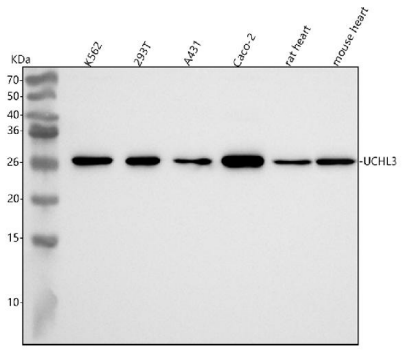


Figure 1. Western blot analysis of UCHL3 using anti-UCHL3 antibody (M05004-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human K562 whole cell lysates,
Lane 2: human 293T whole cell lysates,
Lane 3: human A431 whole cell lysates,
Lane 4: human CACO-2 whole cell lysates,
Lane 5: rat heart tissue lysates,
Lane 6: mouse heart tissue lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-UCHL3 antigen affinity purified monoclonal antibody (Catalog # M05004-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for UCHL3 at approximately 26 kDa. The expected band size for UCHL3 is at 26 kDa.

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