

UCHL3 Antibody
Chicken Polyclonal Antibody
Catalog # ABV11122**Specification**

UCHL3 Antibody - Product Information

Application	WB
Primary Accession	P15374
Reactivity	Human
Host	Chicken
Clonality	Polyclonal
Isotype	Chicken IgG
Calculated MW	26183

UCHL3 Antibody - Additional Information**Gene ID 7347****Application & Usage**

Western blot: Robust detection of 100 ng of recombinant protein was possible when antibody was used at a final concentration of 5 µg/mL

Other Names

Ubiquitin carboxyl-terminal hydrolase isozyme L3, Ubiquitin thioesterase L3, UCH-L3, Ubiquitin C-terminal hydrolase L3

Target/Specificity

UCHL3

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

50 µg of antibody in PBS containing 10% glycerol

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

UCHL3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

UCHL3 Antibody - Protein Information

Name UCHL3

Function

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. Indirectly increases the phosphorylation of IGFIR, AKT and FOXO1 and promotes insulin-signaling and insulin-induced adipogenesis. Required for stress-response retinal, skeletal muscle and germ cell maintenance. May be involved in working memory. Can hydrolyze UBB(+1), a mutated form of ubiquitin which is not effectively degraded by the proteasome and is associated with neurodegenerative disorders.

Cellular Location

Cytoplasm.

Tissue Location

Highly expressed in heart, skeletal muscle, and testis.

UCHL3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

UCHL3 Antibody - Images

UCHL3 Antibody - Background

Protein ubiquitination and Deubiquitination are reversible processes catalyzed by ubiquitinating enzymes (UBEs) and deubiquitinating enzymes (DUBs). DUBs are categorized into 5 subfamilies: USP, UCH, OTU, MJD, and JAMM. UCHL1, UCHL3, UCHL5/UCH37, and BRCA-1-associated protein-1 (BAP1) belong to the UCH family of DUBs, which all possess a conserved catalytic domain (UCH domain) of about 230 amino acids. Although UCHL1 and UCHL3 are the most closely related UCH family members with about 53% identity, their biochemical properties differ in that UCHL1 binds monoubiquitin and UCHL3 shows dual specificity toward both ubiquitin (Ub) and NEDD8, a Ub-like molecule. UCHL3 is a thiol protease that recognizes and hydrolyzes a peptide bond at the C-terminal glycine of either ubiquitin or NEDD8. UCHL3 has a 10-fold preference for Arg and Lys at position P3. It deubiquitinates ENAC in the apical compartments, thereby regulating apical membrane recycling. UCHL3 indirectly increases the phosphorylation of IGFIR, AKT and FOXO1 and promotes insulin-signaling and insulin-induced adipogenesis. It is required for stress-response retinal, skeletal muscle and germ cell maintenance. UCHL3 may be involved in working memory. UCHL3 possesses 52% amino acid identity with UCHL1 and is uniformly expressed in all tissues, including the brain. The activity of UCHL3 is more than 200-fold higher than UCH-L1, as

assessed with a fluorogenic ubiquitin substrate.