

UCHL3 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2127a**Specification**

UCHL3 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [P15374](#)
Other Accession [UCHL3_HUMAN](#)

UCHL3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 7347

Other Names

Ubiquitin carboxyl-terminal hydrolase isozyme L3, UCH-L3, Ubiquitin thioesterase L3, UCHL3

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2127a](/product/products/AP2127a) was selected from the N-term region of human UCHL3 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

UCHL3 Antibody (N-term) Blocking Peptide - 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 (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

UCHL3 Antibody (N-term) Blocking Peptide - Images**UCHL3 Antibody (N-term) Blocking Peptide - 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.

UCHL3 Antibody (N-term) Blocking Peptide - References

Saito, S., et al., J. Hum. Genet. 48(5):249-270 (2003). Wilkinson, K.D., et al., Science 246(4930):670-673 (1989).