Human UCH-L3 / UCHL3 Protein, His Tag

Catalog # UC3-H5141

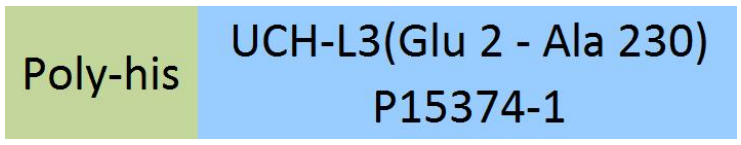
Synonym

UCHL3,Ubiquitin thioesterase L3

Source

Human UCH-L3, His Tag(UC3-H5141) is expressed from E. coli cells. It contains AA Glu 2 - Ala 230 (Accession # P15374-1).
Predicted N-terminus: Met

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 27.0 kDa. The protein migrates as 28-30 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

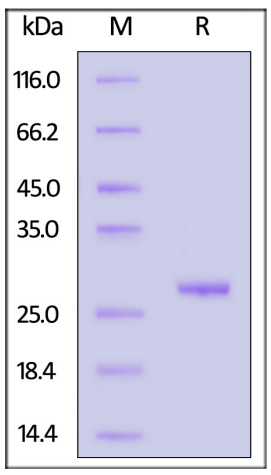
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human UCH-L3, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Ubiquitin carboxyl-terminal hydrolase isozyme L3 (UCH-L3), a member of peptidase C12 family, is also known as ubiquitin thioesterase L3. Deubiquitinating enzyme (DUB) that controls levels of cellular ubiquitin through processing of ubiquitin precursors and ubiquitinated proteins. UCH-L3 is a thiol protease that recognizes and hydrolyzes a peptide bond at the C-terminal glycine of either ubiquitin or NEDD8. UCH-L3 indirectly increases the phosphorylation of IGFIR, AKT and FOXO1 and promotes insulin-signaling and insulin-induced adipogenesis. It is also required for stress-response retinal, skeletal muscle and germ cell

maintenance. Furthermore, UCH-L3 may be involved in working memory and can hydrolyze UBB(+1), a mutated form of ubiquitin which is not effectively degraded by the proteasome and is associated with neurogenerative disorders.