

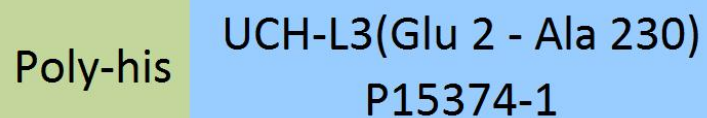
**Synonym**

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.

**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.*

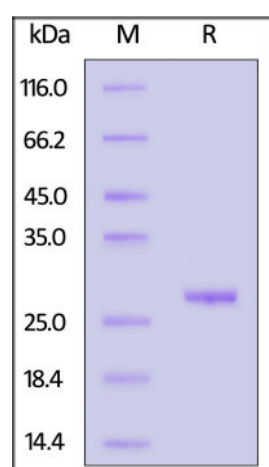
**Storage**

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 overnight 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.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.