# Data Sheet (Cat.No.TMPY-01548)

TargetMol

## UCHL3 Protein, Human, Recombinant (His)

### General Information

Synonyms: ubiquitin carboxyl-terminal esterase L3 (ubiquitin thiolesterase);UCH-L3

Protein Construction: A DNA sequence encoding the human UCHL3 (NP_005993.1) (Glu 2-Ala 230) was expressed, with a polyhistide tag at the N-terminus. Predicted N terminal: Met

Species: Human

Expression Host: E. coli

Accession: P15374

Molecular Weight: 27 kDa (predicted); 26 kDa (reducing conditions)

### QC Testing

Biological Activity: Measured by the hydrolysis of UbiquitinAMC. The specific activity is >14,000 pmoles/min/μg.

Purity: > 97 % as determined by SDS-PAGE

Endotoxin: Please contact us for more information.

Formulation: Supplied as sterile 20 mM Tris, 500 mM NaCl, 20% glycerol, 1 mM DTT, pH 8.0.

### Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

Proteins are shipped with blue ice.

### Protein Background

Ubiquitin carboxyl-terminal hydrolase isozyme L3, also known as UCH-L3, Ubiquitin thioesterase L3 and UCHL3, is a ubiquitin-protein hydrolase that belongs to the peptidase C12 family. It is involved both in the processing of ubiquitin precursors and of ubiquitinated proteins. This enzyme is a thiol protease that recognizes and hydrolyzes a peptide bond at the C-terminal glycine of either ubiquitin or NEDD8. UCHL3 is highly expressed in heart, skeletal muscle, and testis. UCHL1 and UCHL3 are two of the deubiquitinating enzymes expressed in the brain. These phenotypes indicate the importance of UCHL1 and UCHL3 in the regulation of the central nervous system. UCHL3 functions as a de-ubiquitinating enzyme where lack of its hydrolase activity may result in the prominent accumulation of ubiquitinated proteins and subsequent induction of stress responses in skeletal muscle. UCHL3 has also been identified as a tumor-specific antigen in colon cancer.

Reference

Wood,M.A. et al., 2005, Hippocampus 15 (5):610-21.
Kwon,J. et al., 2006, Exp Anim 55 (1):35-43.
Setsuie,R. et al., 2009, Neurochem Int 54 (5-6):314-21.
Setsuie,R. et al., 2010, Neurochem Int 56 (8):911-8.



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