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## Datasheet for ABIN7317507 UCHL1 Protein (His tag)

### Overview

Quantity:	50 µg
Target:	UCHL1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This UCHL1 protein is labelled with His tag.

### Product Details

Purpose:	Recombinant Human UCHL1/PGP9.5 Protein (His Tag)(Active)
Sequence:	Gln 2-Ala 223
Characteristics:	A DNA sequence encoding the native human UCHL1 (NP_004172.2) (Gln 2-Ala 223) was expressed, with a polyhistide tag at the N-terminus.
Purity:	> 92 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	Measured by the hydrolysis of UbiquitinAMC. The specific activity is >100 pmoles/min/µg.

### Target Details

Target:	UCHL1
Alternative Name:	UCHL1/PGP9.5 ( <a href="#">UCHL1 Products</a> )
Background:	Background: Ubiquitin carboxyl-terminal hydrolase isozyme L1, also known as UCH-L1,

## Target Details

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Ubiquitin thioesterase L1, PGP9.5 and UCHL1, is a deubiquitinating enzyme with important functions in recycling of ubiquitin. Regulated proteolysis by the ubiquitin pathway has been implicated in control of the cell cycle, transcriptional activation, cell fate and growth, and synaptogenesis. The ubiquitin-proteasome system is involved in synaptic plasticity and is proposed to be part of a molecular switch that converts short-term synaptic potentiation to long-term changes in synaptic strength. UCHL1 is found in neuronal cell bodies and processes throughout the neocortex (at protein level). It is expressed in neurons and cells of the diffuse neuroendocrine system and their tumors. UCHL1 is weakly expressed in ovary. UCHL1 is a ubiquitin-protein hydrolase. 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 ubiquitin. UCHL1 also binds to free monoubiquitin and may prevent its degradation in lysosomes. The homodimer of UCHL1 may have ATP-independent ubiquitin ligase activity. UCHL1 dysfunction has been associated with neurodegeneration in Parkinson's, Alzheimer's, and Huntington's disease patients. Reduced UCHL1 function may jeopardize the survival of CNS neurons.

Synonym: Ubiquitin Carboxyl-Terminal Hydrolase Isozyme L1, UCH-L1, Neuron Cytoplasmic Protein 9.5, PGP 9.5, PGP9.5, Ubiquitin Thioesterase L1, UCHL1,HEL-117,NDGOA,PARK5,Uch-L1

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Molecular Weight: 25.6 kDa

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NCBI Accession: [NP\\_004172](#)

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Pathways: [Feeding Behaviour](#)

## Application Details

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Restrictions: For Research Use only

## Handling

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Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 20 % glycerol, 1 mM DTT, pH 8.0

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.