

## Recombinant UCHL1 Monoclonal Antibody

catalog number: **AN300545P**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

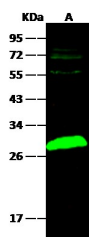
### Description

|                     |                                 |
|---------------------|---------------------------------|
| <b>Reactivity</b>   | Mouse                           |
| <b>Immunogen</b>    | Recombinant Mouse UCHL1 protein |
| <b>Host</b>         | Rabbit                          |
| <b>Isotype</b>      | IgG                             |
| <b>Clone</b>        | B475                            |
| <b>Purification</b> | Protein A                       |
| <b>Buffer</b>       | 0.2 µm filtered solution in PBS |

### Applications Recommended Dilution

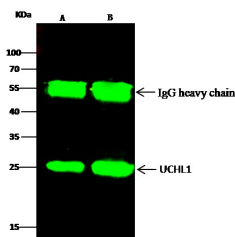
|           |                       |
|-----------|-----------------------|
| <b>WB</b> | 1:500-1:2000          |
| <b>IP</b> | 0.5-2 µL/mg of lysate |

### Data



Western Blot with UCHL1 Monoclonal Antibody at dilution of 1:500 dilution. Lane A: 293T Whole Cell Lysate, Lysates/proteins at 30 µg per lane.

**Observed-MW:27 kDa**  
**Calculated-MW:25 kDa**



Immunoprecipitation analysis using 2 µL anti-Mouse UCHL1 Monoclonal Antibody and 15 µl of 50 % Protein G agarose.

Western blot was performed from the immunoprecipitate using UCHL1 Monoclonal Antibody at a dilution of 1:200.

Lane A:0.5 mg 293T Whole Cell Lysate, Lane B:0.5 mg U87MG Whole Cell Lysate

**Observed-MW:27 kDa**  
**Calculated-MW:25 kDa**

### Preparation & Storage

|                 |  |
|-----------------|--|
| <b>Storage</b>  | This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles. |
| <b>Shipping</b> | Ice bag  |

### Background

#### For Research Use Only

Ubiquitin carboxyl-terminal hydrolase isozyme L1, also known as UCH-L1, 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.

## For Research Use Only

Toll-free: 1-888-852-8623  
Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086  
Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017

Rev. V1.1