

**UCHL1 (aa 58-68) Antibody (internal region)**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF3277a****Specification**

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**UCHL1 (aa 58-68) Antibody (internal region) - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P09936</a>
Other Accession	<a href="#">NP_004172.2</a> , <a href="#">7345</a> , <a href="#">22223 (mouse)</a> , <a href="#">29545 (rat)</a>
Reactivity	Human, Mouse, Rat
Predicted	Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	24824

**UCHL1 (aa 58-68) Antibody (internal region) - Additional Information****Gene ID** 7345**Other Names**

Ubiquitin carboxyl-terminal hydrolase isozyme L1, UCH-L1, 3.4.19.12, 6.-.-., Neuron cytoplasmic protein 9.5, PGP 9.5, PGP9.5, Ubiquitin thioesterase L1, UCHL1

**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

UCHL1 (aa 58-68) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**UCHL1 (aa 58-68) Antibody (internal region) - Protein Information****Name** UCHL1**Function**

Deubiquitinase that plays a role in the regulation of several processes such as maintenance of synaptic function, cardiac function, inflammatory response or osteoclastogenesis (PubMed:&lt;a href="http://www.uniprot.org/citations/22212137" target="\_blank"&gt;22212137&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/23359680" target="\_blank"&gt;23359680&lt;/a&gt;). Abrogates the ubiquitination of multiple proteins including WWTR1/TAZ, EGFR, HIF1A and beta-site amyloid

precursor protein cleaving enzyme 1/BACE1 (PubMed:<a href="http://www.uniprot.org/citations/22212137" target="\_blank">22212137</a>, PubMed:<a href="http://www.uniprot.org/citations/25615526" target="\_blank">25615526</a>). In addition, recognizes and hydrolyzes a peptide bond at the C-terminal glycine of ubiquitin to maintain a stable pool of monoubiquitin that is a key requirement for the ubiquitin-proteasome and the autophagy- lysosome pathways (PubMed:<a href="http://www.uniprot.org/citations/12408865" target="\_blank">12408865</a>, PubMed:<a href="http://www.uniprot.org/citations/8639624" target="\_blank">8639624</a>, PubMed:<a href="http://www.uniprot.org/citations/9774100" target="\_blank">9774100</a>). Regulates amyloid precursor protein/APP processing by promoting BACE1 degradation resulting in decreased amyloid beta production (PubMed:<a href="http://www.uniprot.org/citations/22212137" target="\_blank">22212137</a>). Plays a role in the immune response by regulating the ability of MHC I molecules to reach cross-presentation compartments competent for generating Ag-MHC I complexes (By similarity). Mediates the 'Lys-48'-linked deubiquitination of the transcriptional coactivator WWTR1/TAZ leading to its stabilization and inhibition of osteoclastogenesis (By similarity). Deubiquitinates and stabilizes epidermal growth factor receptor EGFR to prevent its degradation and to activate its downstream mediators (By similarity). Modulates oxidative activity in skeletal muscle by regulating key mitochondrial oxidative proteins (By similarity). Enhances the activity of hypoxia-inducible factor 1-alpha/HIF1A by abrogating its VHL E3 ligase-mediated ubiquitination and consequently inhibiting its degradation (PubMed:<a href="http://www.uniprot.org/citations/25615526" target="\_blank">25615526</a>).

#### **Cellular Location**

Cytoplasm. Endoplasmic reticulum membrane; Lipid- anchor. Note=About 30% of total UCHL1 is associated with membranes in brain. Localizes near and/or within mitochondria to potentially interact with mitochondrial proteins {ECO:0000250|UniProtKB:Q9R0P9}

#### **Tissue Location**

Found in neuronal cell bodies and processes throughout the neocortex (at protein level). Expressed in neurons and cells of the diffuse neuroendocrine system and their tumors. Weakly expressed in ovary. Down-regulated in brains from Parkinson disease and Alzheimer disease patients.

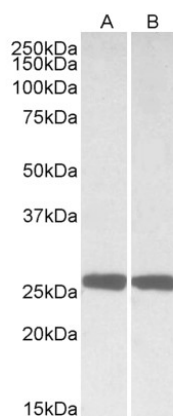
### **UCHL1 (aa 58-68) Antibody (internal region) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

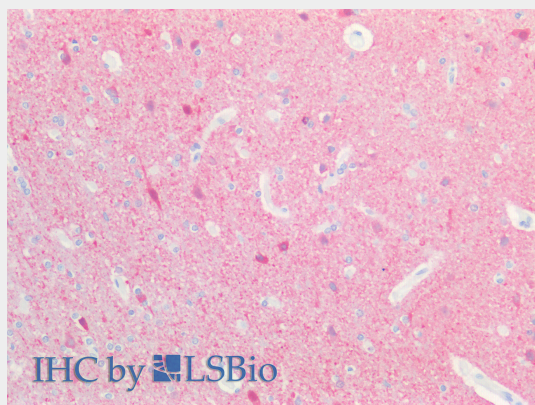
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **UCHL1 (aa 58-68) Antibody (internal region) - Images**





AF3277a (0.01µg/ml) staining of Mouse (A) and Rat (B) Brain lysates (35µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF3277a (2.5µg/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer Ph 6, AP-staining.

#### **UCHL1 (aa 58-68) Antibody (internal region) - References**

Ubiquitin specific proteases USP24 and USP40 and ubiquitin thiolesterase UCHL1 polymorphisms have synergic effect on the risk of Parkinson's disease among Taiwanese. Wu YR, Chen CM, Chen YC, Chao CY, Ro LS, Fung HC, Hsiao YC, Hu FJ, Lee-Chen GJ, Clinica chimica acta; international journal of clinical chemistry 2010 Mar : . PMID: 20302855