

**Anti-PGP9.5 Rabbit Monoclonal Antibody**  
**Catalog # ABO13863****Specification**

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**Anti-PGP9.5 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IP
Primary Accession	<a href="#">P09936</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-PGP9.5 Rabbit Monoclonal Antibody . Tested in WB, IHC, IP applications. This antibody reacts with Human, Mouse, Rat.

**Anti-PGP9.5 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 7345

**Other Names**

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

**Calculated MW**

24824 MW KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>IP 1:50

**Subcellular Localization**

Cytoplasm. Endoplasmic reticulum membrane ; Lipid-anchor. About 30% of total UCHL1 is associated with membranes in brain.

**Tissue Specificity**

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..

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human PGP9.5

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-PGP9.5 Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/22212137" target="\_blank">22212137</a>, PubMed:<a href="http://www.uniprot.org/citations/23359680" target="\_blank">23359680</a>). 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.

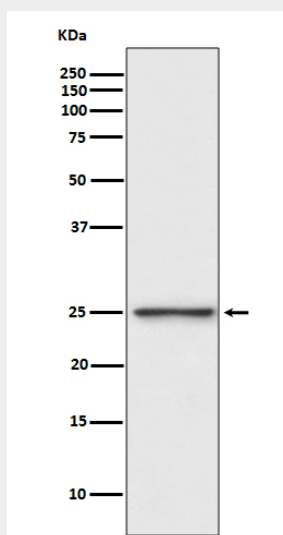
**Anti-PGP9.5 Rabbit Monoclonal Antibody - Protocols**

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

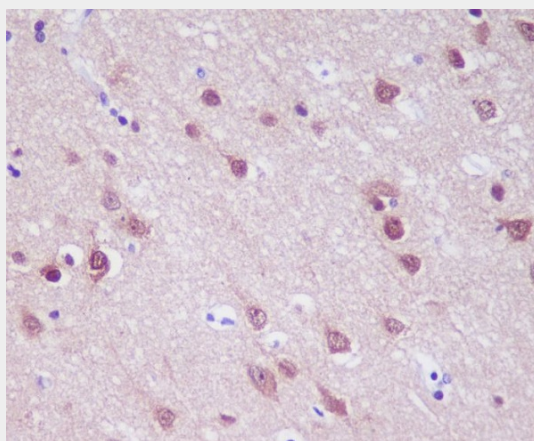
- [Western Blot](#)
- [Blocking Peptides](#)

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

### Anti-PGP9.5 Rabbit Monoclonal Antibody - Images



Western blot analysis of PGP9.5 expression in SH-SY5Y cell lysate.



Immunohistochemical analysis of paraffin-embedded human brain, using PGP9.5 Antibody.