# PGP9.5 / UchL1 (pan-Neuronal Marker) Antibody

Mouse Monoclonal Antibody [Clone UCHL1/16725]

| Catalog No | Format | Size |
|---|---|---|
| 7345-MSM42-P0 | Purified Ab with BSA and Azide at 200ug/ml | 20 ug |
| 7345-MSM42-P1 | Purified Ab with BSA and Azide at 200ug/ml | 100 ug |
| 7345-MSM42-P1ABX | Purified Ab WITHOUT BSA or Azide at 1.0mg/ml | 100 ug |

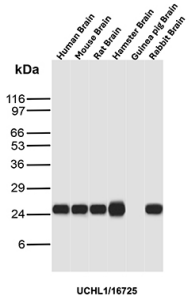
| Applications | Tested Dillution | Note |
|---|---|---|
| Immunohistochemistry (IHC) | 1-2ug/ml | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |
| Western Blot (WB) | 2-4ug/ml | |

## Product Details

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|---|---|
| **Clone** | UCHL1/16725 |
| **Immunogen** | Recombinant fragment (around aa 1-223) of human UCHL1 protein |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype / Light Chain** | IgG2b / Kappa |
| **Mol. Weight of Antigen** | 24.82kDa |
| **Cellular Localization** | Cytoplasm, Endoplasmic reticulum membrane |
| **Species Reactivity** | Human |
| **Positive Control** | Found in neuronal cell bodies and processes throughout the neocortex (at protein level) |

**Optimal dilution for a specific application should be determined.*

## Product Images for PGP9.5 / UchL1 (pan-Neuronal Marker) Antibody




Western blot analysis of brain tissue lysates from human, rat, mouse, hamster and rabbit using UCHL1 Mouse Monoclonal Antibody (UCHL1/16725).

## Specificity & Comments

Deubiquitinase that plays a role in the regulation of several processes such as maintenance of synaptic function, cardiac function, inflammatory response or osteoclastogenesis (PubMed:22212137, PubMed:23359680). Abrogates the ubiquitination of multiple proteins including WWTR1/TAZ, EGFR, HIF1A and beta-site amyloid precursor protein cleaving enzyme 1/BACE1 (PubMed:22212137, PubMed:25615526). 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:12408865, PubMed:8639624, PubMed:9774100). Regulates amyloid precursor protein/APP processing by promoting BACE1 degradation resulting in decreased amyloid beta production (PubMed:22212137). 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 abrogateing its VHL E3 ligase-mediated ubiquitination and consequently inhibiting its degradation (PubMed:25615526).

## Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.