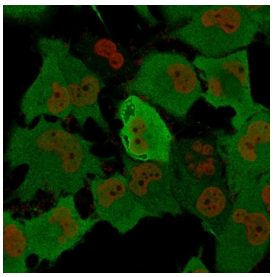
PGP9.5 Antibody / Neuronal Marker for IF [clone rUCHL1/775] (V3662)

Catalog No.	Formulation	Size
V3662-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3662-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3662SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3662IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

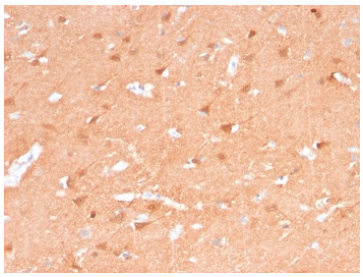
Recombinant | MOUSE MONOCLONAL

Bulk quote request

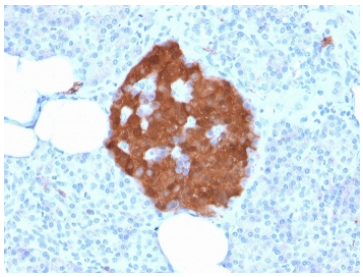
Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rUCHL1/775
Purity	Protein G affinity chromatography
UniProt	P09936
Localization	Cytoplasmic, ER membrane
Applications	Western blot: 1-2ug/ml Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This PGP9.5 antibody is available for research use only.



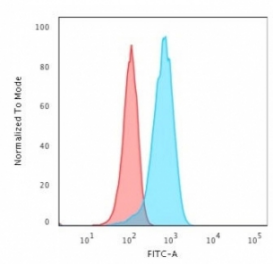
PGP9.5 Antibody for IF. Immunofluorescence analysis in human T98G cells. Permeabilized human T98G cells stained with PGP9.5 Antibody for IF, also known as Neuronal Marker for IF and Ubiquitin C-terminal hydrolase L1 antibody, show strong cytoplasmic fluorescence (green) with diffuse distribution and localized intensity consistent with neuronal marker-associated staining patterns. Nuclear counterstain with Nucspot (red) highlights nuclei. Detection was performed using recombinant mouse monoclonal clone rUCHL1/775, supporting visualization of UCHL1 expression and subcellular localization in human cells.



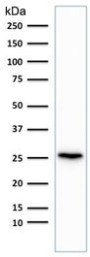
IHC staining of FFPE human cerebellum tissue with recombinant PGP9.5 antibody (clone rUCHL1/775). Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



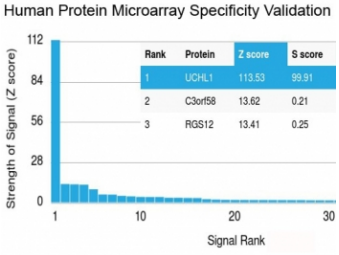
IHC staining of FFPE human pancreas tissue with PGP9.5 antibody (clone rUCHL1/775). Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



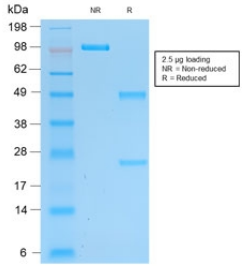
Flow cytometry testing of permeabilized human T98G cells with recombinant PGP9.5 antibody (clone rUCHL1/775); Red=isotype control, Blue= recombinant PGP9.5 antibody.



Western blot testing of human brain lysate with PGP9.5 antibody (clone rUCHL1/775). Predicted molecular weight ~25 kDa.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant PGP9.5 antibody (clone rUCHL1/775). These results demonstrate the foremost specificity of the rUCHL1/775 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free PGP9.5 antibody (clone rUCHL1/775) as confirmation of integrity and purity.

Description

Protein gene product 9.5 (PGP9.5), also known as Ubiquitin C-terminal hydrolase L1 (UCHL1), is a highly expressed neuronal protein localized to the cytoplasm of neurons and nerve fibers, where it functions as a deubiquitinating enzyme critical for neuronal maintenance. The PGP9.5 Antibody for IF is specifically optimized as a neuronal marker for immunofluorescence imaging, enabling high-resolution visualization of neuronal cell bodies, axons, and intricate nerve fiber networks through strong cytoplasmic fluorescence.

PGP9.5 Antibody for IF, also referred to as UCHL1 antibody or ubiquitin C-terminal hydrolase L1 antibody, is widely used as a neuronal marker for IF to identify neurons, neuroendocrine cells, and peripheral nerve fibers. In immunofluorescence applications, this antibody produces characteristic diffuse cytoplasmic fluorescence with prominent neurite-like extensions and fiber-like staining patterns, making it especially valuable for mapping neuronal architecture and visualizing axonal projections at the single-cell level.

This recombinant mouse monoclonal PGP9.5 Antibody for IF (clone rUCHL1/775) delivers high specificity and strong fluorescent signal, supporting consistent detection of neuronal structures across experimental systems. Recombinant monoclonal design ensures defined epitope recognition and minimal background, which is essential for IF workflows focused on subcellular localization and detailed imaging of neuronal morphology. The antibody enables clear visualization of cytoplasmic compartments and elongated neuronal processes in fixed and permeabilized cells.

PGP9.5 is abundantly expressed in central and peripheral nervous system tissues, where it plays a key role in ubiquitin-mediated protein turnover and neuronal survival. In immunofluorescence studies, PGP9.5 signal is strongly enriched in neuronal cytoplasm and extends along axons and dendritic processes, providing a reliable marker for nerve fiber density and neuronal differentiation. This distinct fluorescence pattern makes it a preferred target for imaging-based studies of neural development and neurobiology.

A recombinant mouse monoclonal PGP9.5 Antibody for IF is ideally suited for neuronal immunofluorescence applications, including nerve fiber visualization, neuronal cell identification, and fluorescence-based mapping of neural networks. Its strong cytoplasmic and neurite-associated fluorescence supports high-resolution imaging of neuronal structures and makes it a powerful tool for neuroscience research and cellular imaging studies.

Application Notes

Optimal dilution of the PGP9.5 Antibody / Neuronal Marker for IF should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human protein was used as the immunogen for the PGP9.5 Antibody / Neuronal Marker for IF.

Storage

Store the recombinant PGP9.5 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

UCHL1 antibody, PGP9.5 protein antibody, Ubiquitin C-terminal hydrolase L1 antibody, Neuronal ubiquitin hydrolase antibody

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