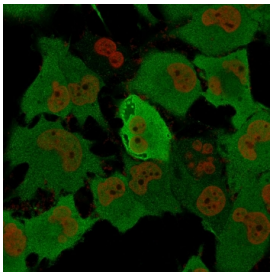
# Recombinant PGP9.5 Antibody [clone rUCHL1/775] (V3662)

| 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 |

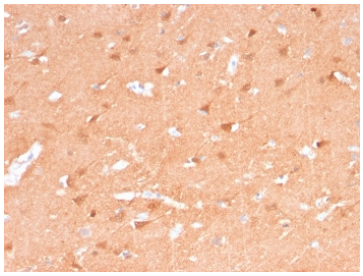
Recombinant MOUSE MONOCLONAL

**Bulk quote request**

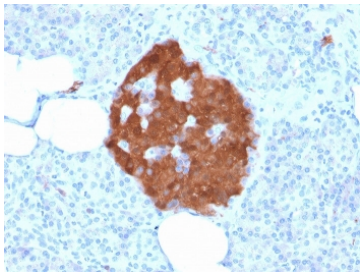
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Rat |
| **Format** | Purified |
| **Clonality** | Recombinant Mouse Monoclonal |
| **Isotype** | Mouse IgG1, kappa |
| **Clone Name** | rUCHL1/775 |
| **Purity** | Protein G affinity chromatography |
| **UniProt**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



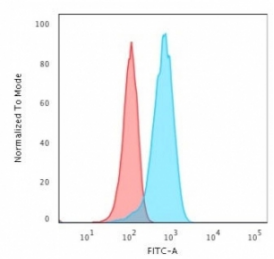
Immunofluorescent staining of permeabilized human T98G cells with recombinant PGP9.5 antibody cocktail (green, clone rUCHL1/775) and Nucspot (red).



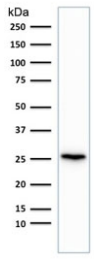
IHC staining of FFPE human cerebellum tissue with recombinant PGP9.5 antibody (clone rUCHL1/775). Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



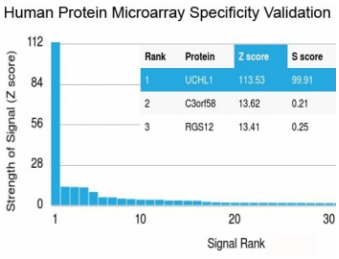
IHC staining of FFPE human pancreas tissue with recombinant PGP9.5 antibody (clone rUCHL1/775). Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



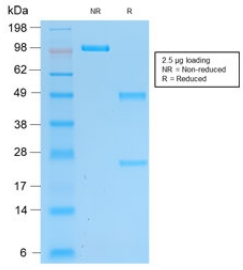

Flow cytometry testing of permeabilized human T98G cells with recombinant PGP9.5 antibody (clone rUCHL1/775); Red=isotype control, Blue= recombinant PGP9.5 antibody.




Western blot testing of human brain lysate with recombinant 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.<BR>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 recombinant PGP9.5 antibody (clone rUCHL1/775) as confirmation of integrity and purity.

## Description

Recombinant PGP9.5 antibody is a well established tool for detecting ubiquitin carboxyl terminal hydrolase L1, also known as protein gene product 9.5 or UCHL1. This enzyme is expressed abundantly in neurons and cells of the neuroendocrine system, where it contributes to ubiquitin dependent protein degradation and turnover. Because of its restricted distribution, PGP9.5 is a widely used marker for neurons and neuroendocrine differentiation.

PGP9.5 belongs to the ubiquitin carboxyl terminal hydrolase family of deubiquitinating enzymes. It regulates the recycling of ubiquitin by cleaving ubiquitin from small adducts or misfolded proteins, thereby sustaining proteostasis. Mutations in UCHL1 have been associated with neurological disorders, including Parkinson disease and hereditary neuropathies, underscoring its biological importance.

The Recombinant PGP9.5 antibody clone rUCHL1/775 delivers precise and reproducible recognition. Recombinant technology ensures lot to lot consistency, reducing variability in experimental systems. Clone rUCHL1/775 has been applied in neuroscience to label neurons, in pathology to diagnose neuroendocrine tumors, and in cell biology to study ubiquitin metabolism. Its specificity makes it a trusted reagent across multiple fields.

Research using clone rUCHL1/775 has clarified how PGP9.5 supports neuronal survival, axonal maintenance, and synaptic function. It has also demonstrated value in diagnostic pathology, where PGP9.5 detection helps identify neuroendocrine neoplasms and peripheral nerve tumors. This antibody continues to provide insight into neuronal biology and neurodegenerative disease.

NSJ Bioreagents provides this Recombinant PGP9.5 antibody to support neuroscience and pathology research. The protein is also described as UCHL1 antibody, protein gene product 9.5 antibody, neuron specific ubiquitin hydrolase antibody, and neuroendocrine marker antibody, reflecting the varied nomenclature used in the scientific community.

## Application Notes

Optimal dilution of the recombinant PGP9.5 antibody 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 recombinant PGP9.5 antibody.

## Storage

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