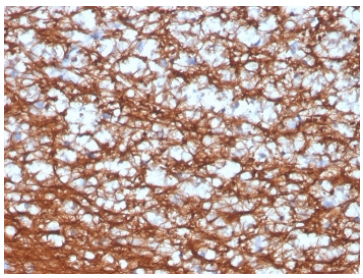
PGP9.5 Antibody / Neuronal Structure Marker Antibody [clone UCHL1/4556R] (V8653)

Catalog No.	Formulation	Size
V8653-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8653-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8653SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

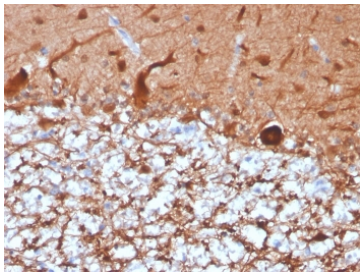
Recombinant RABBIT MONOCLONAL

Bulk quote request

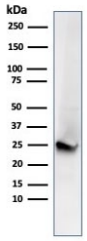
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	UCHL1/4556R
Purity	Protein A affinity chromatography
UniProt	P09936
Localization	Cytoplasmic, ER membrane
Applications	Western blot: 2-4ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This recombinant PGP9.5 antibody is available for research use only.



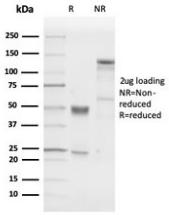
PGP9.5 Antibody / Neuronal Structure Marker Antibody. Immunohistochemistry analysis of PGP9.5 / UCHL1 in FFPE human cerebellum. IHC staining of FFPE human cerebellum using PGP9.5 Antibody / Neuronal Structure Marker Antibody highlights dense neuronal networks with strong HRP-DAB brown cytoplasmic staining extending along neurites and axonal processes. The staining outlines interconnected nerve fiber architecture within cerebellar tissue, with prominent labeling of neuronal cell bodies and extensive neuritic branching, while surrounding non-neuronal cells show minimal signal. Clone UCHL1/4556R demonstrates clear visualization of neuronal morphology and neural connectivity, supporting detailed assessment of tissue-level neuroanatomy.



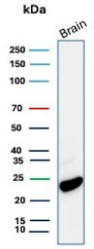
PGP9.5 Antibody / Neuronal Structure Marker Antibody. Immunohistochemistry analysis of PGP9.5 / UCHL1 in FFPE human cerebellum. Immunohistochemical staining of FFPE human cerebellum using PGP9.5 Antibody / Neuronal Structure Marker Antibody reveals extensive HRP-DAB brown cytoplasmic labeling of neuronal elements, with signal distributed along neuritic extensions and axonal fibers. The staining pattern emphasizes the layered organization of cerebellar tissue, with dense networks of nerve fibers forming a continuous mesh-like architecture and clear visualization of neuronal morphology. Clone UCHL1/4556R supports detailed assessment of neurite organization and neural tissue structure while non-neuronal regions remain largely unstained.



Western blot testing of human brain lysate with recombinant PGP9.5 antibody. Predicted molecular weight ~25 kDa.



SDS-PAGE analysis of purified, BSA-free recombinant PGP9.5 antibody (clone UCHL1/4556R) as confirmation of integrity and purity.



PGP9.5 Antibody / Neuronal Structure Marker Antibody for WB. Western blot analysis of PGP9.5 / UCHL1 in human brain lysate. Lane 1: human brain lysate. A band is detected at approximately 25 kDa, consistent with the predicted molecular weight of Protein gene product 9.5 / UCHL1. The strong signal observed in brain lysate aligns with the high neuronal expression of this protein, which is widely associated with neuronal cell bodies and extended neuritic processes within neural tissue.

Description

Protein gene product 9.5 (PGP9.5), also known as Ubiquitin C-terminal hydrolase L1 (UCHL1), is a cytoplasmic protein highly enriched in neurons and widely used for visualization of neuronal architecture within complex tissues. The PGP9.5 Antibody / Neuronal Structure Marker Antibody (clone UCHL1/4556R) is specifically suited for highlighting neuronal morphology, enabling clear delineation of neurites, axons, and interconnected nerve fiber networks in both tissue sections and cell-based systems.

PGP9.5 Antibody, also referred to as UCHL1 antibody or ubiquitin C-terminal hydrolase L1 antibody, is particularly valuable for neuroanatomical studies where structural detail is critical. Its strong cytoplasmic expression in neurons produces continuous staining along neuronal processes, allowing visualization of axonal projections, dendritic extensions, and fine neuritic branching. This makes it highly effective for mapping neural circuitry and examining the organization of neuronal networks within complex tissue environments.

This recombinant rabbit monoclonal PGP9.5 Antibody (clone UCHL1/4556R) provides consistent and well-defined labeling of neuronal structures, supporting high-contrast visualization of nerve fibers and cellular processes. The antibody

highlights both neuronal cell bodies and extended projections, enabling researchers to trace structural relationships between cells and evaluate tissue-level organization of neural systems. Its strong and uniform staining pattern is particularly useful for studies focused on nerve fiber density, neurite outgrowth, and architectural integrity.

PGP9.5 is expressed throughout the central and peripheral nervous systems, where it is distributed within the cytoplasm and along neuronal processes. This localization allows detailed visualization of neuronal pathways and supports analysis of structural changes associated with development, injury, or disease. Detection of PGP9.5 therefore provides direct insight into the physical organization and connectivity of neural tissue.

A PGP9.5 Antibody / Neuronal Structure Marker Antibody (clone UCHL1/4556R) is ideally suited for research applications focused on neuroanatomy, neuronal network mapping, and visualization of neurite architecture. Its positioning as a structure-focused neuronal marker clearly differentiates it from general detection reagents and makes it a powerful tool for studying the organization and connectivity of the nervous system.

Application Notes

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

Immunogen

Recombinant full-length human protein was used as the immunogen for the PGP9.5 Antibody / Neuronal Structure Marker Antibody.

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 antibody, Ubiquitin C-terminal hydrolase L1 antibody, Neuronal structure marker PGP9.5 antibody

Copyright © NSJ Bioreagents. All rights reserved.