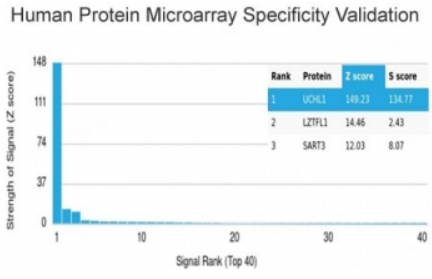
PGP9.5 Antibody / Microarray Specificity Validated Antibody [clone UCHL1/4558] (V9290)

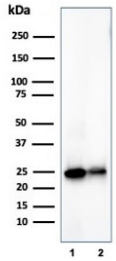
Catalog No.	Formulation	Size
V9290-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9290-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9290SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

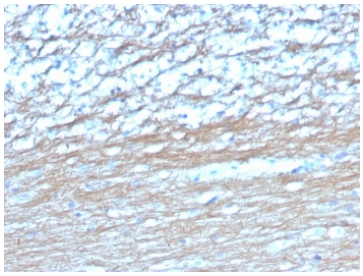
Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	UCHL1/4558
Purity	Protein A/G affinity
UniProt	P09936
Localization	Cytoplasmic
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This PGP9.5 antibody is available for research use only.



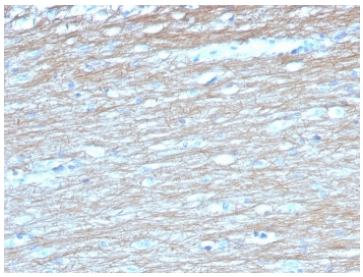
PGP9.5 Antibody Microarray Specificity Validated. Analysis of human protein microarray (HuProt). Human proteome microarray screening using PGP9.5 Antibody Microarray Specificity Validated, also known as UCHL1 antibody or Ubiquitin C-terminal hydrolase L1 antibody, demonstrates highly selective binding to UCHL1 as the top-ranked target among more than 19,000 full-length human proteins. Clone UCHL1/4558 shows a dominant Z-score and strong S-score separation from all non-target proteins, confirming exceptional specificity and minimal cross-reactivity. Z-score reflects signal intensity relative to the array mean, while S-score represents the specificity gap between the top target and subsequent proteins, supporting high-confidence target recognition in complex proteomic environments.



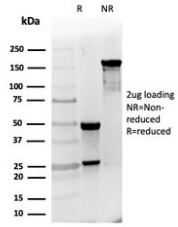
PGP9.5 Antibody for WB. Western blot analysis in human brain and T98G cell lysates. Human brain tissue and T98G cell lysates stained with PGP9.5 Antibody for WB, also known as Microarray Specificity Validated Antibody and Ubiquitin C-terminal hydrolase L1 antibody, show clear bands at approximately 25 kDa, consistent with the predicted molecular weight of PGP9.5 / UCHL1. The clean, well-defined bands across both lysates support highly specific detection of UCHL1, aligning with proteome-scale microarray validation demonstrating minimal cross-reactivity.



PGP9.5 Antibody for IHC. Immunohistochemistry analysis of PGP9.5 / UCHL1 in human cerebellum tissue. FFPE human cerebellum stained with PGP9.5 Antibody for IHC, also known as Microarray Specificity Validated Antibody and Ubiquitin C-terminal hydrolase L1 antibody, shows strong cytoplasmic and neuropil-associated HRP-DAB brown staining in neuronal cells, consistent with the known neuronal enrichment of UCHL1. The clean staining pattern with low background supports highly specific target recognition, aligning with proteome-scale microarray validation demonstrating minimal cross-reactivity in complex tissue environments.



IHC staining of FFPE human cerebellum tissue with PGP9.5 antibody (clone UCHL1/4558). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free PGP9.5 antibody (clone UCHL1/4558) 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 cytoplasmic protein frequently analyzed in complex biological systems where antibody specificity is critical. The PGP9.5 Antibody / Microarray Specificity Validated Antibody is engineered for applications requiring the highest level of target selectivity, supported by proteome-scale microarray screening against thousands of full-length human proteins.

PGP9.5 Antibody / Microarray Specificity Validated Antibody, also referred to as UCHL1 antibody or ubiquitin C-terminal hydrolase L1 antibody, has undergone large-scale protein microarray validation to confirm highly selective binding to UCHL1 with minimal off-target interaction. Unlike standard validation approaches, this method evaluates antibody performance across a broad representation of the human proteome, enabling direct identification of cross-reactivity risks and ensuring that signal is strongly enriched for the intended target.

This mouse monoclonal PGP9.5 Antibody (clone UCHL1/4558) demonstrates a dominant target-specific signal in microarray screening, with negligible binding to unrelated proteins. Such proteome-wide specificity profiling provides a high level of confidence when working with complex lysates, heterogeneous tissues, or multiplex experimental systems where non-specific binding can obscure true biological signal. The antibody is therefore particularly well suited for experiments requiring precise target discrimination.

UCHL1 shares structural similarity with other members of the deubiquitinating enzyme family, making rigorous specificity validation especially important. Microarray-based screening across thousands of proteins ensures that this antibody distinguishes UCHL1 from closely related proteins within the ubiquitin pathway, reducing the likelihood of false-positive detection and improving reproducibility of experimental results.

A PGP9.5 Antibody / Microarray Specificity Validated Antibody is ideally suited for research applications where specificity is the defining requirement, including high-content analysis, complex tissue studies, and experiments demanding low cross-reactivity. Its proteome-scale validation distinguishes it from conventional antibodies and positions it as a high-confidence tool for accurate UCHL1 detection.

Application Notes

Optimal dilution of the PGP9.5 antibody should be determined by the researcher.

Immunogen

KLH conjugated synthetic peptide selected from the 185-214 region of human UCHL1 was used as the immunogen for the PGP9.5 Antibody / Microarray Specificity Validated Antibody.

Storage

Aliquot the PGP9.5 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

UCHL1 antibody, PGP9.5 protein antibody, Ubiquitin C-terminal hydrolase L1 antibody, High specificity UCHL1 antibody

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