abcam

ab220823

Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR4118
Purification technique	Affinity purification Protein A
Concentration	1.005 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	-

Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	-
Notes	-

Expected

Species	Human, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-Fr

Tested

Species	Mouse
Dilution info	-
Notes	Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

Expected

Species	Human, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Mouse
Dilution info	-
Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Target data

See full target information UCHL1

Function	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).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab220823 is the carrier-free version of ab108986.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Protein Gene Product 9.5 (PGP9.5) also known as ubiquitin carboxyl-terminal hydrolase L1 (UCH-L1) is an enzyme of approximately 27 kDa mass. PGP9.5 is highly expressed in neurons and neuroendocrine cells and is involved in the processing of ubiquitinated proteins. Ubiquitination and deubiquitination are critical for maintaining cellular protein homeostasis. PGP9.5 is present in the central and peripheral nervous systems. Researchers often utilize PGP9.5 as a neuronal marker due to its strong expression in nerve tissues. Antibody clone 13C4 is commonly used in PGP9.5 immunohistochemistry to visualize this protein in histopathology sections.
Biological function summary	PGP9.5 plays a significant role in the ubiquitin-proteasome pathway where it regulates protein degradation. It functions by cleaving ubiquitin from ubiquitin-protein conjugates which can recycle ubiquitin for reuse impacting protein turnover. This process is important for removing misfolded or damaged proteins maintaining cellular integrity. PGP9.5 has not been documented as a part of any large multimeric complex; its action is rather individual yet vital in cellular processes.
Pathways	PGP9.5 is an important participant in the ubiquitin-dependent proteolysis pathway. This pathway controls the degradation of proteins that regulate cell cycle differentiation and neuromodulation. PGP9.5 works in tandem with other proteins such as the proteasome complex to remove proteins tagged for destruction.

	Another important pathway linked with PGP9.5 is the neuronal development pathway in which its activity supports neuron growth and repair.
Associated diseases and disorders	Defective PGP9.5 function associates mainly with neurodegenerative diseases such as Parkinson's disease and Alzheimer's disease. Mutations or dysregulation in PGP9.5 expression are implicated in the pathogenesis of these conditions affecting protein degradation and neuronal health. Other proteins like α-synuclein in Parkinson's disease interact with PGP9.5 pathways indicating their involvement in disease mechanisms. Researchers consider PGP9.5 a potential biomarker for neuronal pathology through methods like PGP9.5 IHC allowing for evaluation of nerve damage and neuroendocrine tumor diagnosis.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

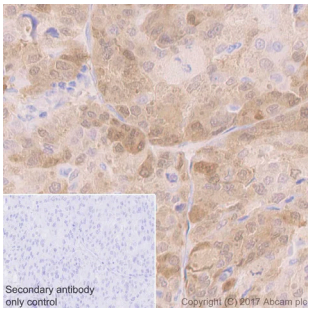
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

16 product images

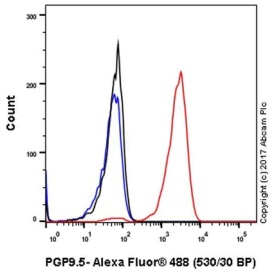


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PGP9.5 antibody

Immunohistochemical analysis of paraffin-embedded human hepatocellular carcinoma tissue labeling PGP9.5 with ab108986, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on human hepatocellular carcinoma. The section was incubated with ab108986 for 30 mins at room temperature. Counterstained with Hematoxylin. Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

This data was generated using the same anti-PGP9.5 antibody clone, EPR4118, in a different buffer formulation (cat# ab108986).

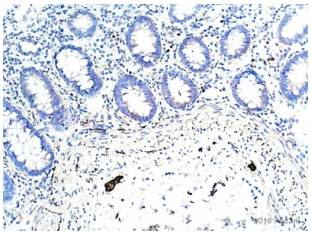


Flow Cytometry (Intracellular) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Flow Cytometry (Intracellular) staining using rabbit Anti-PGP9.5 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Y79 (Human retinoblastoma retinoblastoma) cells labelling PGP9.5 with ab108986 at 1/20 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) isotype control (black)and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.
This data was generated using the same anti-PGP9.5 antibody clone, EPR4118, in a different buffer formulation (cat

ab108986).

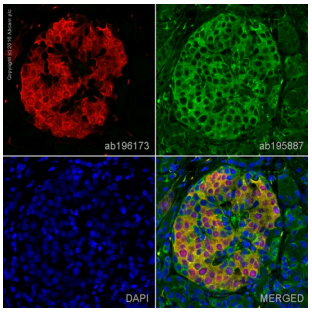


This image is courtesy of a customer review submitted by Carl Hobbs.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PGP9.5 antibody

ab108986 staining PGP9.5 in human colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 2% BSA for 10 minutes at 21°C; antigen retrieval was by heat mediation in citric acid. Samples were incubated with the primary antibody (1/500 in TBS/BSA/azide) for 16 hours at 21°C. A Biotin-conjugated goat anti-rabbit IgG polyclonal (1/300) was used as the secondary antibody. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108986).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PGP9.5 antibody

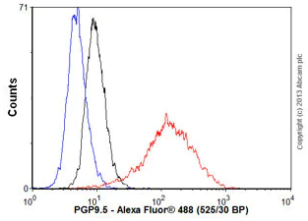
Clone EPR4118 (ab220823) has been successfully conjugated by Abcam. This image was generated using Anti-PGP9.5 antibody [EPR4118] (Alexa Fluor® 647). Please refer to ab196173 for protocol details.
IHC image of PGP9.5 staining in a section of formalin-fixed paraffin-embedded normal human pancreas*.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6) in a Dako Pascal pressure cooker using the standard factory-set regime. Non-specific protein-protein interactions were then blocked in TBS containing 0.025% (v/v) Triton X-100, 0.3M (w/v) glycine and 1% (w/v) BSA for 1h at room temperature. The section was then incubated overnight at +4°C in TBS containing 0.025% (v/v) Triton X-100 and 1% (w/v) BSA with ab196173 at 1/100 (shown in red) and counterstained using ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Fluoromount®.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

For other IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antigen retrieval conditions, antibody concentrations and incubation times.

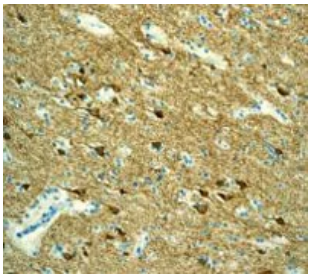
*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Flow Cytometry (Intracellular) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Flow Cytometry (Intracellular) staining using rabbit Anti-PGP9.5 antibody

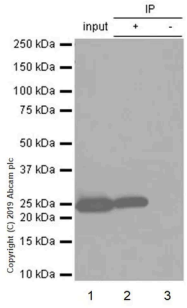
Overlay histogram showing SH-SY5Y cells stained with ab108986 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab108986, 1/10000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1 µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in SH-SY5Y cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108986).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PGP9.5 antibody

Immunohistochemical staining of PGP9.5 in paraffin embedded Human glioma tissue, using ab108986 at a 1/250 dilution.This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108986).



Immunoprecipitation - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 was immunoprecipitated from 0.35 mg Human fetal brain lysate with ab108986 at 1/20 dilution (0.5µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab108986 1/500 dilution (0.17 µg/ml). VeriBlot for IP Detection Reagent (HRP) (ab131366) was used as the secondary antibody at 1/1000 dilution.
Lane 1: Human fetal brain lysate 10µg
Lane 2: ab108986 IP in Human fetal brain lysate
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab108986 in Human fetal brain lysate.

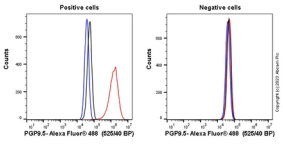
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.

This data was generated using the same anti-PGP9.5 antibody clone, EPR4118, in a different buffer formulation (cat# ab108986).

All lanes:
Immunoprecipitation - Anti-PGP9.5 antibody [EPR4118] - Neuronal Marker (ab108986)

Predicted band size: 24 kDa



Flow Cytometry (Intracellular) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Flow Cytometry (Intracellular) staining using rabbit Anti-PGP9.5 antibody

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108986).

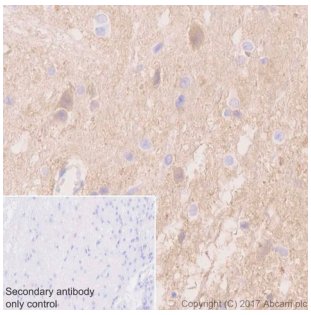
Flow cytometry overlay histogram showing left Neuro2a positive cells and right negative NIH3T3 stained with ab108986 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab108986) (1x 106 in 100µl at 0.2µg/ml (1/10500)) for 30min at 22°C.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min at 22°C

Isotype control antibody (black line) was Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.

This antibody gave a positive signal in Neuro2a Fixed with 80% methanol (5 min) / permeabilised with 0.1% PBS-Triton X-100 for 15 min under the same conditions.

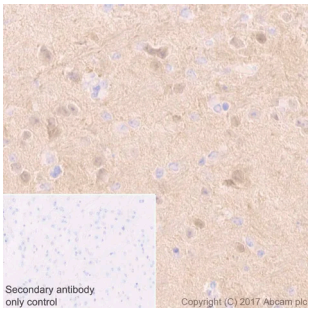


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PGP9.5 antibody

Immunohistochemical analysis of paraffin-embedded rat cerebral cortex tissue labeling PGP9.5 with ab108986, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on rat cerebral cortex. The section was incubated with ab108986 overnight at 4°C. Counterstained with Hematoxylin. Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

This data was generated using the same anti-PGP9.5 antibody clone, EPR4118, in a different buffer formulation (cat# ab108986).

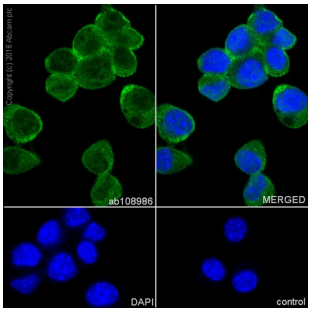


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PGP9.5 antibody

Immunohistochemical analysis of paraffin-embedded mouse cerebral cortex tissue labeling PGP9.5 with ab108986, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on mouse cerebral cortex. The section was incubated with ab108986 for 30 mins at room temperature. Counterstained with Hematoxylin. Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

This data was generated using the same anti-PGP9.5 antibody clone, EPR4118, in a different buffer formulation (cat# ab108986).

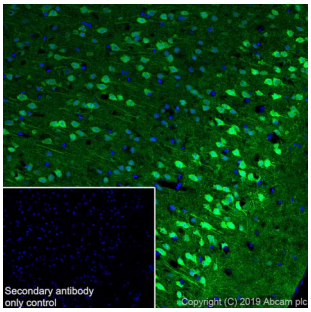


Immunocytochemistry/ Immunofluorescence - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PGP9.5 antibody

This ICC/IF data was generated using the same anti-PGP9.5 antibody clone, EPR4118, in a different buffer formulation (cat# ab108986).
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Neuro-2a (Mouse neuroblastoma cell line) cells labeling PGP9.5 with ab108986 at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on Neuro-2a cell line. The nuclear counter stain is DAPI (blue).

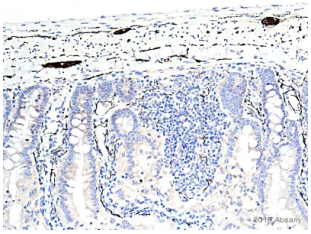
The negative control is PBS only.



Immunohistochemistry (Frozen sections) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Immunohistochemistry (Frozen sections) staining using rabbit Anti-PGP9.5 antibody

Immunohistochemistry (Frozen sections) analysis of mouse cerebrum tissue sections labeling PGP9.5 with Purified ab108986 at 1/250 (0.5 µg/ml).Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. DAPI was used as a counterstain.
This data was generated using the same anti-PGP9.5 antibody clone, EPR4118, in a different buffer formulation (cat# ab108986).



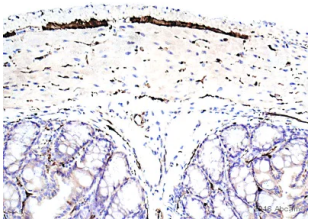
This image is courtesy of a customer review submitted by Carl Hobbs

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PGP9.5 antibody

Immunohistochemical analysis of rat Jejunum tissue sections labeling PGP9.5 with ab108986 at a dulution of 1/1000. Sections were fixed with Formaldehyde. A Biotin conjugated Goat Anti-Rabbit IgG at 1/300 was used as the secondary antibody. Antigen retrieval was heat mediated using citric acid.
All nerve components of enteric plexuses appear to be very well demonstrated, particularly the fine fibres of the lamina propria and the muscularis mucosa.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108986).



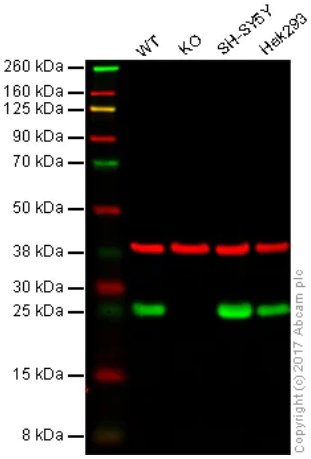
This image is courtesy of a customer review submitted by Carl Hobbs

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PGP9.5 antibody

Immunohistochemical analysis of mouse colon tissue sections labeling PGP9.5 with ab108986 at a dulution of 1/1500. Sections were fixed with Formaldehyde. A Biotin conjugated Goat Anti-Rabbit IgG at 1/300 was used as the secondary antibody. Antigen retrieval was heat mediated using citric acid.
All nerve cell/fibre components of enteric plexuses are demonstrated very well.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108986).



Western blot - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Western blot staining using rabbit Anti-PGP9.5 antibody

This WB data was generated using the same anti-PGP9.5 antibody clone, EPR4118, in a different buffer formulation (cat# ab108986).
Lanes 1 - 4: Merged signal (red and green). Green - ab108986 observed at 24 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab108986 was shown to specifically react with UCHL1 (KO) in wild-type cells as signal was lost in UCHL1 (KO) knockout HAP1 cells. Wild-type and UCHL1 (KO) knockout samples were subjected to SDS-PAGE. ab108986 and ab8245 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-PGP9.5 antibody [EPR4118] - Neuronal Marker (ab108986) at 1/1000 dilution

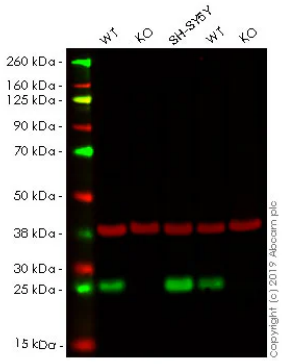
Lane 1:
Wild-type HAP1 whole cell lysate at 20 µg

Lane 2:
UCHL1 knockout HAP1 whole cell lysate at 20 µg

Lane 3:
SH-SY5Y whole cell lysate at 20 µg

Lane 4:
HEK293 whole cell lysate at 20 µg

Predicted band size: 24 kDa



Western blot - Anti-PGP9.5 antibody [EPR4118] - BSA and Azide free (ab220823)

PGP9.5 Western blot staining using rabbit Anti-PGP9.5 antibody

This data was developed using the same antibody clone in a different buffer formulation (ab108986).
Lanes 1-4: Merged signal (red and green). Green - ab108986 observed at 25 kDa. Red - loading control, ab8245 observed at 37 kDa.

ab108986 was shown to react with PGP9.5 in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout sample ab263773 was used. Wild-type and PGP9.5 knockout samples were subjected to SDS-PAGE. ab108986 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-PGP9.5 antibody [EPR4118] - Neuronal Marker (ab108986) at 1/1000 dilution

Lane 1:
Wild-type HAP1 cell lysate at 20 µg

Lane 2:
UCHL1 knockout HAP1 cell lysate at 20 µg

Lane 3:
SH-SY5Y cell lysate at 20 µg

Lane 4:
Wild-type HEK-293T cell lysate at 20 µg

Lane 5:
Western blot - Human UCHL1 (PGP9.5) knockout HEK-293T cell line (ab255443)

Lane 5:
UCHL1 knockout HEK-293T cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 24 kDa

Observed band size: 25 kDa, 37 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.