

Product datasheet

Anti-PGP9.5 antibody [EPR4117] ab109261

KO VALIDATED Recombinant RabMAB[®]

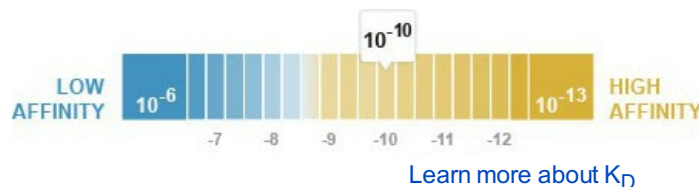
★★★★☆ 5 Abreviews 1 References 5 Images

Overview

Product name	Anti-PGP9.5 antibody [EPR4117]
Description	Rabbit monoclonal [EPR4117] to PGP9.5
Tested applications	Suitable for: WB, IP, IHC-P Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	A synthetic peptide corresponding to residues in Human PGP9.5.
Positive control	Fetal brain, Y79, U-87 MG, HAP1 and SH SY5Y lysates; Human brain tissue.
General notes	This product is a recombinant rabbit monoclonal antibody. Our RabMAB [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab[®] patents

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 7.20 x 10 ⁻¹⁰ M



Storage buffer	PBS 49%,Sodium azide 0.01%,Glycerol 50%,BSA 0.05%
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR4117
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab109261** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

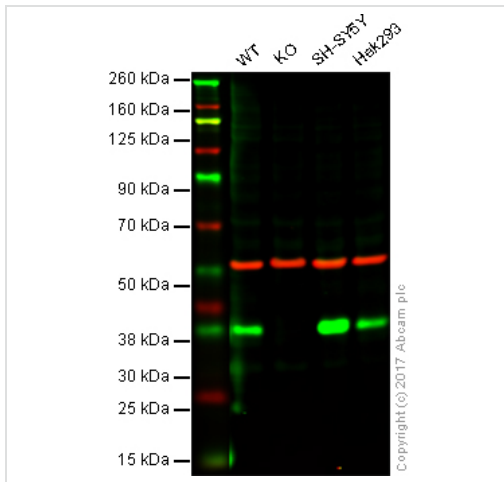
Application	Abreviews	Notes
WB	★★★★★	1/1000 - 1/10000. Detects a band of approximately 25 kDa (predicted molecular weight: 24 kDa).
IP		1/10 - 1/100.
IHC-P	★★★☆☆	1/50 - 1/100. Perform antigen retrieval before commencing with IHC staining protocol

Application notes Is unsuitable for Flow Cyt.

Target

Function	Ubiquitin-protein hydrolase involved both in the processing of ubiquitin precursors and of ubiquitinated proteins. This enzyme is a thiol protease that recognizes and hydrolyzes a peptide bond at the C-terminal glycine of ubiquitin. Also binds to free monoubiquitin and may prevent its degradation in lysosomes. The homodimer may have ATP-independent ubiquitin ligase activity.
Tissue specificity	Found in neuronal cell bodies and processes throughout the neocortex (at protein level). Expressed in neurons and cells of the diffuse neuroendocrine system and their tumors. Weakly expressed in ovary. Down-regulated in brains from Parkinson disease and Alzheimer disease patients.
Involvement in disease	Parkinson disease 5 Neurodegeneration with optic atrophy, childhood-onset
Sequence similarities	Belongs to the peptidase C12 family.
Post-translational modifications	O-glycosylated.
Cellular localization	Cytoplasm. Endoplasmic reticulum membrane. About 30% of total UCHL1 is associated with membranes in brain.

Images



Western blot - Anti-PGP9.5 antibody [EPR4117] (ab109261)

Predicted band size : 24 kDa

Lane 1: Wild type HAP1 whole cell lysate (20 µg)

Lane 2: UCHL1 (KO) knockout HAP1 whole cell lysate (20 µg)

Lane 3: SH-SY5Y whole cell lysate (20 µg)

Lane 4: HEK293 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green).

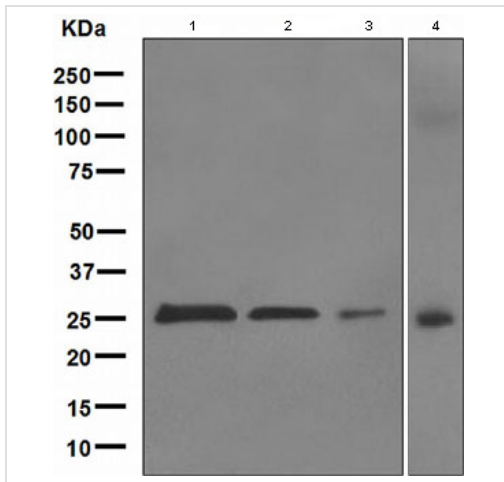
Green - ab109261 observed at 24 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

Ab109261 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. Ab109261 and [ab8245](#) (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 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.



ab109261 at 1/50 dilution staining PGP9.5 in Human brain by Immunohistochemistry, Paraffin-embedded tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PGP9.5 antibody [EPR4117] (ab109261)



Western blot - Anti-PGP9.5 antibody [EPR4117]
(ab109261)

All lanes : Anti-PGP9.5 antibody [EPR4117]
(ab109261) at 1/1000 dilution

Lane 1 : Human fetal brain lysate

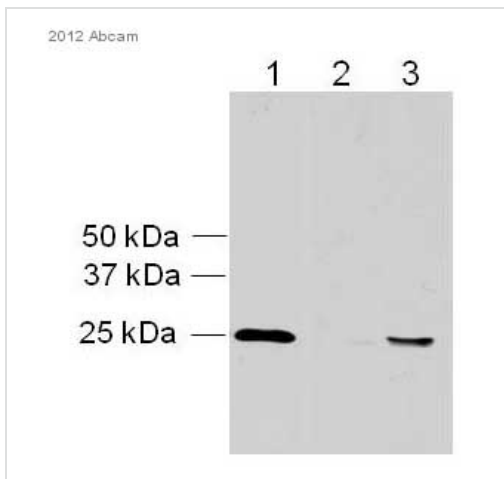
Lane 2 : Y79 lysate

Lane 3 : U-87 MG lysate

Lane 4 : SH SY5Y lysate

Lysates/proteins at 10 µg per lane.

Predicted band size : 24 kDa



Western blot - Anti-PGP9.5 antibody [EPR4117]
(ab109261)

Image courtesy of Dr Simone Diestel by Abreview.

All lanes : Anti-PGP9.5 antibody [EPR4117]
(ab109261) at 1/1000 dilution

Lane 1 : Whole tissue lysate prepared from
adult mouse brain homogenate (CD-1 strain)

Lane 2 : Whole tissue lysate prepared from
non transfected control cells (low endogenous
expression of UCH-L1)

Lane 3 : Whole tissue lysate prepared from
cells transfected with UCH-L1-Flag cDNA
(positive control)

Lysates/proteins at 100 µg per lane.

Secondary

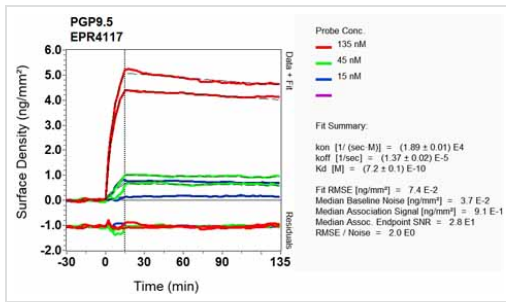
HRP conjugated goat anti-rabbit polyclonal at
1/10000 dilution

Developed using the ECL technique

Predicted band size : 24 kDa

Exposure time : 2 minutes

*Image courtesy of Dr Simone Diestel by
Abreview.*



Other - Anti-PGP9.5 antibody [EPR4117]
(ab109261)

Equilibrium disassociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

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