

## Product datasheet

# Anti-PGP9.5 antibody [EPR4117] ab109261

**KO VALIDATED** Recombinant RabMAB<sup>®</sup>

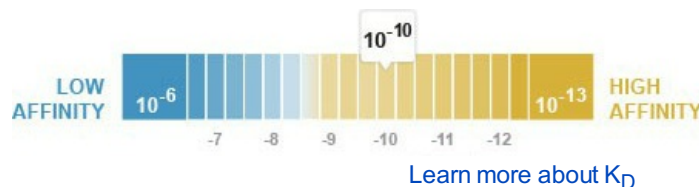
★★★★☆ 5 Abreviews 1 References 5 Images

### Overview

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

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Dissociation constant (K<sub>D</sub>)</b>	K <sub>D</sub> = 7.20 x 10 <sup>-10</sup> M



<b>Storage buffer</b>	PBS 49%,Sodium azide 0.01%,Glycerol 50%,BSA 0.05%
<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4117
<b>Isotype</b>	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.

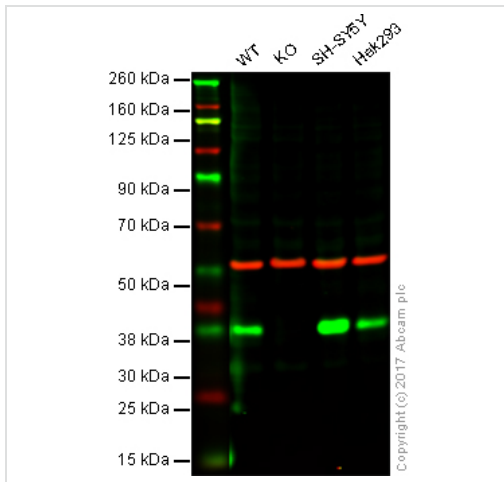
Application	Abreviews	Notes
WB	★★★★★	1/1000 - 1/10000. Detects a band of approximately 25 kDa (predicted molecular weight: 24 kDa).
IP		1/10 - 1/100.
IHC-P	★★★☆☆	1/50 - 1/100. Perform antigen retrieval before commencing with IHC staining protocol

**Application notes** Is unsuitable for Flow Cyt.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	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.
<b>Involvement in disease</b>	Parkinson disease 5 Neurodegeneration with optic atrophy, childhood-onset
<b>Sequence similarities</b>	Belongs to the peptidase C12 family.
<b>Post-translational modifications</b>	O-glycosylated.
<b>Cellular localization</b>	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).

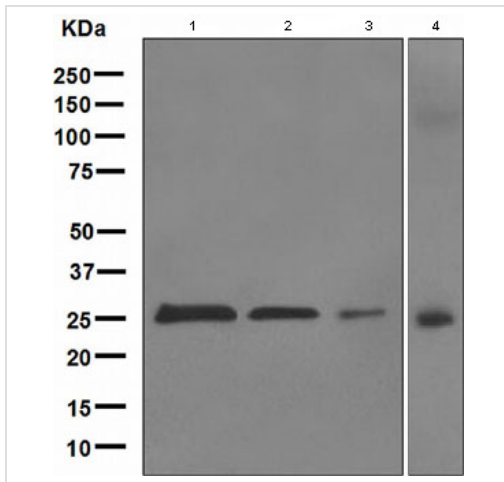
Green - ab109261 observed at 24 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

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

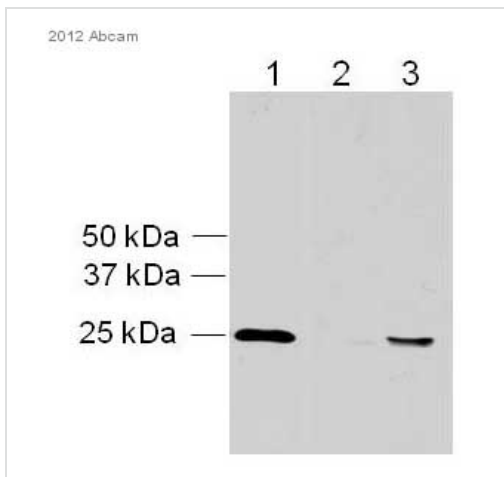
**Lane 2 :** Y79 lysate

**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

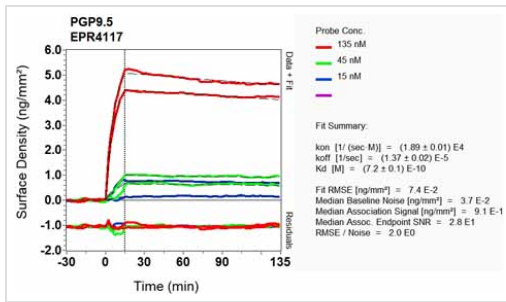
HRP conjugated goat anti-rabbit polyclonal at 1/10000 dilution

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\$](#)

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <http://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors