abcam

Product datasheet

Anti-Peripherin antibody [EPR23445-28] ab246502

Recombinant RabMAb

★★★★★ 3 Abreviews 1 References 14 Images

Overview

Product name Anti-Peripherin antibody [EPR23445-28]

Description Rabbit monoclonal [EPR23445-28] to Peripherin

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, IP, IHC-P, IHC-Fr, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Human spinal cord, Human lower limb nerve, Human nerve, SH-SY5Y, Mouse dorsal

> ganglion, Rat dorsal ganglion, Mouse spinal cord, Rat spinal cord, Mouse sciatic nerve, Neuro-2a and PC-12 lysates. IHC-P: Human colon, Mouse colon and Rat colon tissues. IHC-Fr: Mouse and rat colon tissue. ICC: SH-SY5Y and Neuro-2a cells. Flow:: SH-SY5Y and Neuro-2a cells. IP:

Human spinal cord lysate.

General notes 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 production

For more information see here.

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 +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

Clone number EPR23445-28

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab246502 in the following tested applications.

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

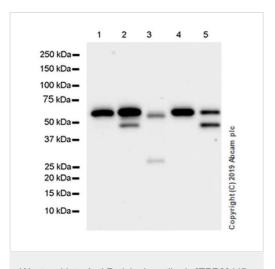
Application	Abreviews	Notes
Flow Cyt (Intra)		1/50.
WB		1/1000. Detects a band of approximately 58, 56, 45, 28 kDa (predicted molecular weight: 54 kDa).
IP		1/30.
IHC-P	★★★★★ (3)	1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Use at 1/10,000 dilution for mouse and rat.
IHC-Fr		1/250. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
ICC/IF		1/100.

Target

Function Class-III neuronal intermediate filament protein.

Sequence similarities Belongs to the intermediate filament family.

Images



Western blot - Anti-Peripherin antibody [EPR23445-28] (ab246502)

All lanes: Anti-Peripherin antibody [EPR23445-28] (ab246502) at 1/1000 dilution

Lane 1: Mouse dorsal ganglion lysate

Lane 2: Rat dorsal ganglion lysate

Lane 3: Mouse spinal cord lysate

Lane 4: Rat spinal cord lysate

Lane 5: Mouse sciatic nerve lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 54 kDa

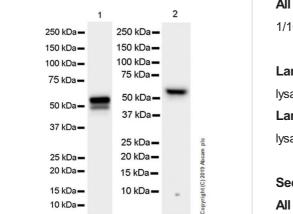
Observed band size: 28,45,56,58 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 26 seconds.

The 58KD, 56KD, 45KD and 28KD isoforms of peripherin observed are consistent with what has been described in the

literature (PMID: 20587592,18287500,17475883).



10 kDa-

Western blot - Anti-Peripherin antibody [EPR23445-28] (ab246502)

15 kDa-10 kDaAll lanes: Anti-Peripherin antibody [EPR23445-28] (ab246502) at 1/1000 dilution

Lane 1: Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate at 20 µg

Lane 2: PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate at 10 µg

Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 54 kDa

Observed band size: 45,56,58 kDa

Exposure time: 6 seconds.

The 58KD, 56KD and 45KD isoforms of peripherin observed are consistent with what has been described in the literature (PMID: 20587592, 18287500, 17475883).

1 2 3 4 5

250 kDa = 150 kDa = 100 kDa = 75 kDa = 37 kDa = 37 kDa = 37 kDa = 15 kDa = 15 kDa = 100 kDa = 15 kDa = 100 kDa = 100 kDa = 15 kDa = 100 kDa = 15 kDa = 100 kDa = 100

Western blot - Anti-Peripherin antibody [EPR23445-28] (ab246502)

All lanes : Anti-Peripherin antibody [EPR23445-28] (ab246502) at 1/1000 dilution

Lane 1: Human spinal cord lysate

Lane 2: Human lower limb nerve lysate

Lane 3: Human nerve lysate

Lane 4: SH-SY5Y (human neuroblastoma epithelial cell) whole cell

lysate

Lane 5: Human kidney lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (<u>ab97051</u>) or VeriBlot for IP secondary antibody (HRP) (<u>ab131366</u>) at 1/100000 dilution

Predicted band size: 54 kDa

Observed band size: 45,56,58 kDa

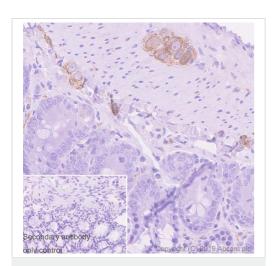
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 37 seconds.

The 58KD, 56KD, and 45KD isoforms of peripherin observed are consistent with what has been described in the literature (PMID:

20587592, 18287500, 17475883).

Negative control: Kidney (PMID: 15132161).

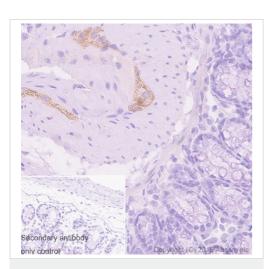


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Peripherin antibody
[EPR23445-28] (ab246502)

Immunohistochemical analysis of paraffin-embedded Rat colon tissue labeling Peripherin with ab246502 at 1/10,000 dilution (0.05 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on the ganglion cells in rat colon. The section was incubated with ab246502 for 10 mins at room temperature. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

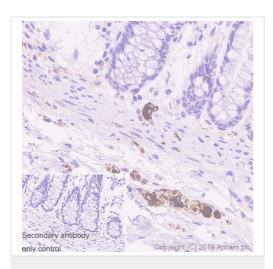


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Peripherin antibody
[EPR23445-28] (ab246502)

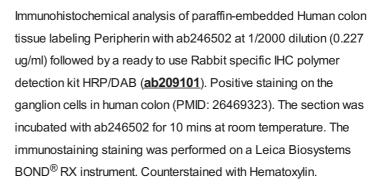
Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labeling Peripherin with ab246502 at 1/10,000 dilution (0.05 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on the ganglion cells in mouse colon. The section was incubated with ab246502 for 10 mins at room temperature. The immunostaining staining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

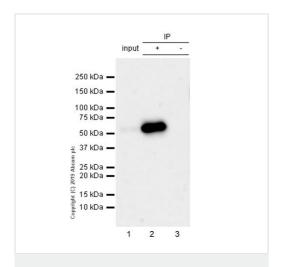


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Peripherin antibody
[EPR23445-28] (ab246502)



Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Immunoprecipitation - Anti-Peripherin antibody [EPR23445-28] (ab246502)

Peripherin was immunoprecipitated from 0.35 mg Human spinal cord lysate with ab246502 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab246502 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.

Lane 1: Human spinal cord lysate 10ug

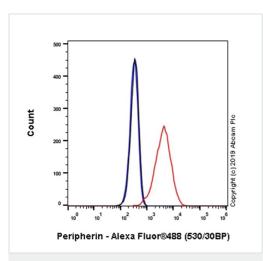
Lane 2: ab246502 IP in Human spinal cord lysate

Lane 3: Rabbit monoclonal lgG ($\underline{ab172730}$) instead of ab246502 in Human spinal cord lysate

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

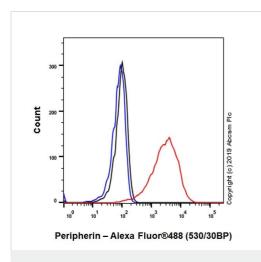
Exposure time: 40 seconds.

The 58KD isoform of peripherin observed is consistent with what has been described in the literature (PMID: 20587592, 18287500, 17475883).



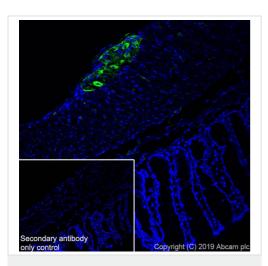
Flow Cytometry (Intracellular) - Anti-Peripherin antibody [EPR23445-28] (ab246502)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized Neuro-2a (mouse neuroblastoma neuroblast) cells labelling Peripherin with ab246502 at 1/50 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control 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.



Flow Cytometry (Intracellular) - Anti-Peripherin antibody [EPR23445-28] (ab246502)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized SH-SY5Y (human neuroblastoma epithelial cell) cells labelling Peripherin with ab246502 at 1/50 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control 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.

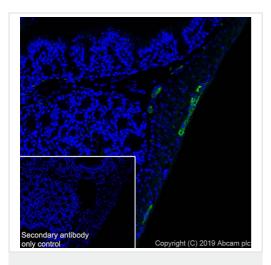


Immunohistochemistry (Frozen sections) - Anti-Peripherin antibody [EPR23445-28] (ab246502)

Immunohistochemical analysis of frozen section of 4% PFA-fixed, 0.2% Triton X-100 permeabilized rat colon tissue labeling Peripherin with ab246502 at 1/250 dilution, followed by **ab150077** AlexaFluor[®]488 Goat anti-Rabbit secondary at 1/1000 dilution (Green). Positive staining on the ganglion cells in rat colon is observed. The nuclear counter stain is DAPI (Blue).

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

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab150077</u> AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.

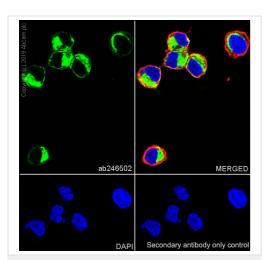


Immunohistochemistry (Frozen sections) - Anti-Peripherin antibody [EPR23445-28] (ab246502)

Immunohistochemical analysis of frozen section of 4% PFA-fixed, 0.2% Triton X-100 permeabilized mouse colon tissue labeling Peripherin with ab246502 at 1/250 dilution, followed by **ab150077** AlexaFluor[®]488 Goat anti-Rabbit secondary at 1/1000 dilution (Green). Positive staining on the ganglion cells in mouse colon is observed. The nuclear counter stain is DAPI (Blue).

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

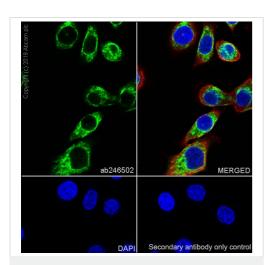
Secondary antibody only control: Used PBS instead of primary antibody, secondary is ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-Peripherin antibody [EPR23445-28] (ab246502)

Immunofluorescent analysis of4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Neuro-2a (mouse neuroblastoma neuroblast) cells labeling Peripherin with ab246502 at 1/100 dilution, followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in Neuro-2a cell line. Tubulin is detected using ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 dilution (Red). The nuclear counter stain is DAPI (Blue).

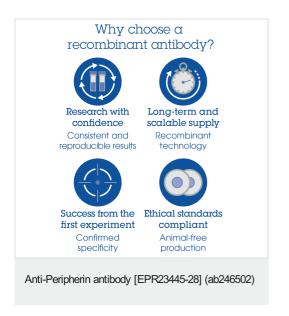
Secondary antibody only control: Used PBS instead of primary antibody, followed by <u>ab150077</u> AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-Peripherin antibody [EPR23445-28] (ab246502)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SH-SY5Y (human neuroblastoma epithelial cell) cells labeling Peripherin with ab246502 at 1/100 dilution, followed by **ab150077** AlexaFluor[®]488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in SH-SY5Y cell line. Tubulin is detected using **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) at 1/200 dilution (Red). The nuclear counter stain is DAPI (Blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab150077</u> AlexaFluor®488 Goat anti-Rabbit at 1/1000 dilution.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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