abcam

ab275150

Alexa Fluor® 488 Anti-Peripherin antibody [EPR23445-28]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR23445-28
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	-

Expected

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

Flow Cyt (Intra)

Expected

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

ICC/IF

Expected

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

Target data

See full target information PRPH

Function	Class-III neuronal intermediate filament protein (By similarity). May form an independent structural network without the involvement of other neurofilaments or may cooperate with the neuronal intermediate filament proteins NEFL, NEFH, NEFM and INA to form a filamentous network (PubMed:15322088, PubMed:15446584). Assembly of the neuronal intermediate filaments may be regulated by RAB7A (By similarity). Plays a role in the development of unmyelinated sensory neurons (By similarity). May be involved in axon elongation and axon regeneration after injury (By similarity). Inhibits neurite extension in type II spiral ganglion neurons in the cochlea (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

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.

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Supplementary info

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

Activity summary	Peripherin also known as 8G2 or 7C5 is a protein expressed strongly in peripheral and certain central nervous system neurons. The mass of the peripherin protein is approximately 57 kDa. This intermediate filament protein structurally supports neurons aiding in their proper formation maintenance and regeneration. Peripherin localizes to the axons of mature neurons and serves important functions in the neuronal cytoskeleton and its stability.
Biological function summary	Peripherin impacts the nervous system's structure and dynamics. As part of the cytoskeleton it contributes to neurofilament networks which are essential for neuronal shape and mechanical integrity. Peripherin plays a role in neuronal differentiation and apoptosis. It operates independently but occasionally interacts with other cytoskeletal proteins like neurofilament light protein to perform its duties in neuronal cells.
Pathways	Peripherin is involved in processes associated with neuronal development and injury response. It features in neurogenesis pathways where it influences the growth and repair of axons. Peripherin interacts with proteins such as vimentin which helps manage cell dynamics and stress responses. The axonal transport pathway also utilizes peripherin to support axonal transport under stressful conditions ensuring cellular integrity and function.
Associated diseases and disorders	Peripherin connects strongly to neurodegenerative diseases such as amyotrophic lateral sclerosis (ALS) and spinal muscular atrophy (SMA). Its overexpression or aggregation can create abnormal filamentous structures that contribute to motor neuron degeneration. In ALS peripherin may interact with TAR DNA-binding protein 43 (TDP-43) and superoxide dismutase 1 (SOD1) proteins known to be significant in the disease pathogenesis. Understanding peripherin’s role in these diseases aids in unraveling mechanisms underlying neuronal degeneration.

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

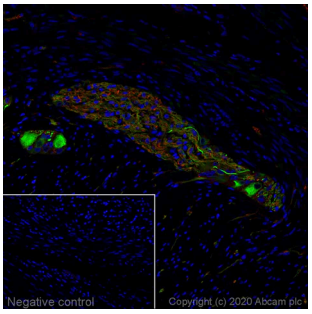
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 488 Anti-Peripherin antibody [EPR23445-28] (ab275150)

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

Immunofluorescence staining of Peripherin staining in a section of formalin-fixed paraffin-embedded human normal colon*.
Performed on a Leica BOND. The section was pre-treated using heat mediated antigen retrieval with EDTA (pH9.0) using retrieval settings of 110°C for 20 minutes. The section was then incubated at room temperature for 1 hour with ab275150 at 1/100 dilution (shown in green) and counterstained using ab195884, Rat monoclonal to Tubulin (Alexa Fluor® 647), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Dako Fluorescence Mounting Medium®.

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.

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