abcam

ab181151

Anti-SNAP29 antibody [EPR9198(2)]

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR9198(2)
Purification technique	Affinity purification Protein A
Concentration	0.083 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30 - 1/50
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/250
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information Synaptosomal-associated protein 29

Function	SNAREs, soluble N-ethylmaleimide-sensitive factor-attachment protein receptors, are essential proteins for fusion of cellular membranes. SNAREs localized on opposing membranes assemble to form a trans-SNARE complex, an extended, parallel four alpha-helical bundle that drives membrane fusion. SNAP29 is a SNARE involved in autophagy through the direct control of autophagosome membrane fusion with the lysosome membrane. Also plays a role in ciliogenesis by regulating membrane fusions.

Storage

Shipped at conditions	Conditional Ambient
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

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.

Supplementary info

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

Activity summary	SNAP29 known also as synaptosomal-associated protein 29 functions mainly in membrane fusion. It weighs about 29 kDa. This protein plays a significant role in intracellular membrane trafficking guiding vesicle fusion events. It is expressed in many tissues with high occurrence in neuronal and non-neuronal cells. SNAP29 contains coiled-coil domains that facilitate its role in binding with SNARE complexes which assist in the docking and fusion of vesicles with target membranes.
Biological function summary	RNA encoding this protein facilitates vesicle-mediated transport on the cellular level especially under conditions requiring rapid membrane addition or reshaping. SNAP29 acts alongside other SNARE proteins like syntaxin and VAMP in the SNARE complex to modulate membrane interactions. The protein eases the process of cytoplasmic content exchange between organelles. As part of these complexes SNAP29 maintains cellular homeostasis by contributing to membrane dynamics and trafficking processes.
Pathways	Vesicular transport in the cell highly depends on SNAP29 especially in exocytosis and endocytosis pathways. Alongside other SNARE proteins SNAP29 fits into the vesicle docking and fusion pathways ensuring efficient membrane recycling and cargo delivery. It interacts with several proteins in the process including syntaxin 1 and VAMP2 to facilitate these important functions within these pathways.
Associated diseases and disorders	Impairments or mutations in the SNAP29 gene link to conditions like CEDNIK syndrome and other neurodevelopmental disorders. CEDNIK syndrome arises from disrupted membrane trafficking and organelle biogenesis due to SNAP29 dysfunction. In these cases a relationship with other proteins in the disease pathways such as STXBP1 can also alter disease progression and severity influencing neuronal communication and stability.

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

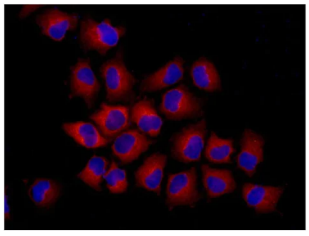
We do not recommend this combination. It is not covered by our product promise.

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.

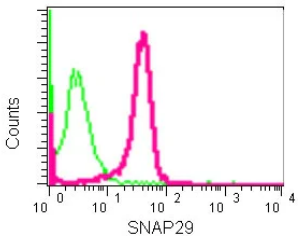
5 product images



Immunocytochemistry/ Immunofluorescence - Anti-SNAP29 antibody [EPR9198(2)] (ab181151)

SNAP29 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-SNAP29 antibody

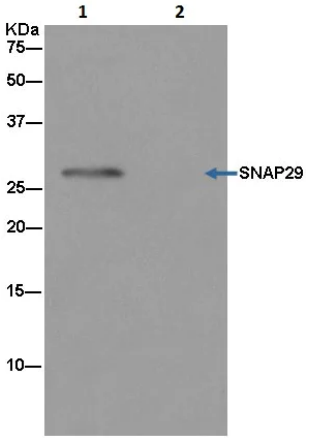
Immunofluorescent analysis of -20°C acetone fixed Hela cells staining SNAP29 using ab181151 at 1/250 dilution and Alexa Fluor® 555 stained Goat anti Rabbit IgG at 1/250 as a secondary antibody (red). Dapi counterstain (blue).



Flow Cytometry (Intracellular) - Anti-SNAP29 antibody [EPR9198(2)] (ab181151)

SNAP29 Flow Cytometry (Intracellular) staining using rabbit Anti-SNAP29 antibody

Intracellular flow cytometric analysis of 2% paraformaldehyde fixed Jurkat cells staining SNAP29 using ab181151 at 1/10 dilution, and FITC conjugated Goat anti rabbit IgG at 1/150 as a secondary antibody (red curve). Rabbit monoclonal IgG was used as the negative control (green curve).



Immunoprecipitation - Anti-SNAP29 antibody [EPR9198(2)] (ab181151)

Western blot analysis of SNAP29 in immunoprecipitation pellets from Jurkat cell lysate, using ab181151 at a 1/50 dilution.
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated was used as a secondary antibody at 1/1000 dilution.

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

All lanes:
Immunoprecipitation - Anti-SNAP29 antibody [EPR9198(2)] (ab181151) at 1/50 dilution

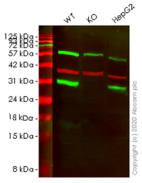
Lane 1:
Precipitate from Jurkat lysate using ab181151

Lane 2:
Jurkat lysate

Secondary

All lanes:
Peroxidase conjugated Goat anti-Rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 29 kDa



Western blot - Anti-SNAP29 antibody [EPR9198(2)] (ab181151)

SNAP29 Western blot staining using rabbit Anti-SNAP29 antibody

Lanes 1-3: Merged signal (red and green). Green - ab181151 observed at 29 kDa. Red - loading control ab8245 observed at 36 kDa.
ab181151 Anti-SNAP29 antibody [EPR9198(2)] was shown to specifically react with SNAP29 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265289 (knockout cell lysate ab257693) was used. Wild-type and SNAP29 knockout samples were subjected to SDS-PAGE. ab181151 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-SNAP29 antibody [EPR9198(2)] (ab181151) at 1/1000 dilution

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

Lane 2:
Western blot - Human SNAP29 knockout HeLa cell lysate (ab257693) at 20 µg

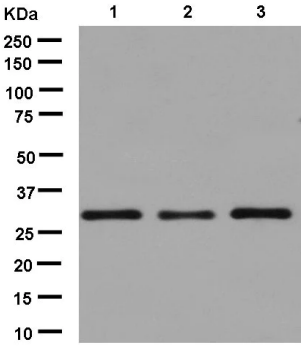
Lane 3:
HepG2 cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 29 kDa

Observed band size: 29 kDa



Western blot - Anti-SNAP29 antibody [EPR9198(2)] (ab181151)

SNAP29 Western blot staining using rabbit Anti-SNAP29 antibody

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

All lanes:
Western blot - Anti-SNAP29 antibody [EPR9198(2)] (ab181151) at 1/5000 dilution

Lane 1:
HeLa cell lysate at 20 µg

Lane 2:
293 cell lysate at 20 µg

Lane 3:
Jurkat cell lysate at 20 µg

Secondary

All lanes:
Peroxidase conjugated Goat anti-Rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 29 kDa

Observed band size: 29 kDa

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