abcam

ab271049

Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 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	EPR24325-98
Purification technique	Affinity purification Protein A
Concentration	0.486 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Species	Rat

Dilution info	1/50
Notes	-

Species	Human
Dilution info	1/50
Notes	-

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Species	Human
Dilution info	1/30
Notes	-

Expected

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

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

IHC-P

Not recommended

Species	Rat, Human, Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Species	Rat
Dilution info	1/500
Notes	-

Species	Human
Dilution info	1/500
Notes	-

Target data

See full target information Kif5a

Function Microtubule-dependent motor required for slow axonal transport of neurofilament proteins (NFH, NFM and NFL) (PubMed:12682084). Can induce formation of neurite-like membrane protrusions in non-neuronal cells in a ZFYVE27-dependent manner. The ZFYVE27-KIF5A complex contributes to the vesicular transport of VAPA, VAPB, SURF4, RAB11A, RAB11B and RTN3 proteins in neurons (PubMed:21976701). Required for anterograde axonal transportation of

MAPK8IP3/JIP3 which is essential for MAPK8IP3/JIP3 function in axon elongation (By similarity).

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.

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.

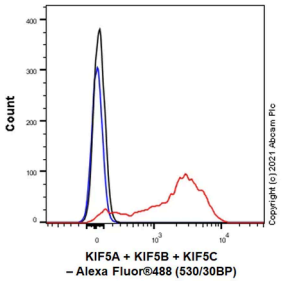
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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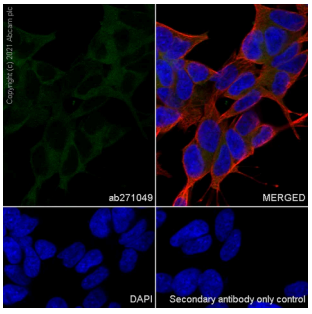
12 product images



Flow Cytometry (Intracellular) - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C Flow Cytometry (Intracellular) staining using rabbit Anti-KIF5A + KIF5B + KIF5C antibody

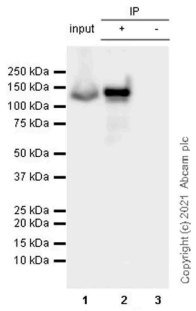
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized SH-SY5Y (Human neuroblastoma epithelial cell) cells labelling KIF5A + KIF5B + KIF5C with ab271049 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat F(ab')2 Anti-Rabbit IgG(DyLight® 488, ab98507) at 1/500 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-KIF5A + KIF5B + KIF5C antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized SH-SY5Y cells labelling KIF5A + KIF5B + KIF5C with ab271049 at 1/50 (9.72 ug/ml) dilution, followed by ab150080 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) antibody at 1/500 (4 ug/ml) dilution (Green). Confocal image showing cytoplasmic staining in SH-SY5Y cell line. is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150080 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) at 1/500 (4 ug/ml) dilution.



Immunoprecipitation - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C was immunoprecipitated from 0.35 mg SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate 10 ug with ab271049 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab271049 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.
Lane 1: SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate 10 ug

Lane 2: ab271049 IP in SH-SY5Y whole cell lysate

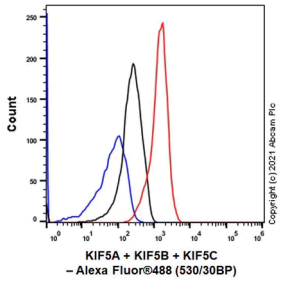
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab271049 in SH-SY5Y whole cell lysate

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

Exposure time: 3 seconds

All lanes:
Immunoprecipitation - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

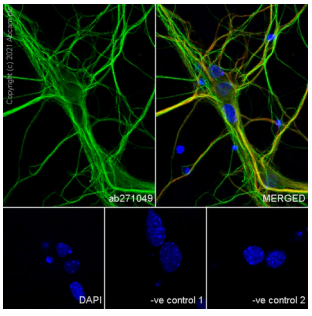
Observed band size: 117 kDa



Flow Cytometry (Intracellular) - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C Flow Cytometry (Intracellular) staining using rabbit Anti-KIF5A + KIF5B + KIF5C antibody

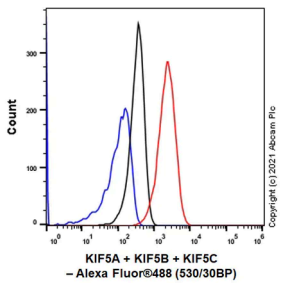
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized C6 (Rat glial tumor glial cell) cells labelling KIF5A + KIF5B + KIF5C with ab271049 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-KIF5A + KIF5B + KIF5C antibody

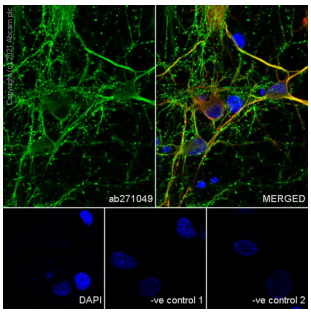
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neuron cells labelling KIF5A + KIF5B + KIF5C with ab271049 at 1/50 (9.72 ug/ml) dilution, followed by ab150080 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) antibody at 1/500 (4 ug/ml) dilution (Green). Confocal image showing cytoplasmic staining in mouse primary neuron. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150080 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) at 1/500 (4 ug/ml) dilution.



Flow Cytometry (Intracellular) - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C Flow Cytometry (Intracellular) staining using rabbit Anti-KIF5A + KIF5B + KIF5C antibody

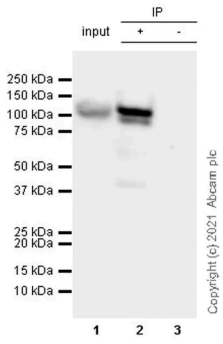
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Neuro-2a (Mouse neuroblastoma neuroblast) cells labelling KIF5A + KIF5B + KIF5C with ab271049 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-KIF5A + KIF5B + KIF5C antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized rat primary neuron cells labelling KIF5A + KIF5B + KIF5C with ab271049 at 1/50 (9.72 ug/ml) dilution, followed by ab150080 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) antibody at 1/500 (4 ug/ml) dilution (Green). Confocal image showing cytoplasmic staining in rat primary neuron. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection ab11267 Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 (4 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150080 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) at 1/500 (4 ug/ml) dilution.



Immunoprecipitation - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C was immunoprecipitated from 0.35 mg Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate 10 ug with ab271049 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab271049 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.
Lane 1: Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate 10 ug

Lane 2: ab271049 IP in Neuro-2a whole cell lysate

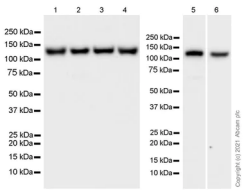
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab271049 in Neuro-2a whole cell lysate

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

Exposure time: 3 seconds

All lanes:
Immunoprecipitation - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

Observed band size: 117 kDa



Western blot - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C Western blot staining using rabbit Anti-KIF5A + KIF5B + KIF5C antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST
Exposure time: 10 seconds

All lanes:
Western blot - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049) at 1/1000 dilution

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

Lane 2:
C2C12 (mouse myoblasts myoblast), whole cell lysate at 20 µg

Lane 3:
U-87 MG (human glioblastoma-astrocytoma epithelial cell), whole cell lysate at 20 µg

Lane 4:
SH-SY5Y (human neuroblastoma epithelial cell), whole cell lysate at 20 µg

Lane 5:
Rat brain cortex tissue lysate at 20 µg

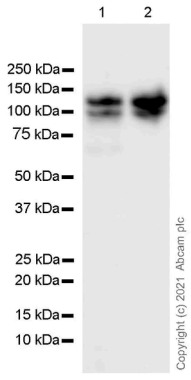
Lane 6:
C6 (rat glial tumor glial cell), whole cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 117 kDa

Observed band size: 117 kDa



Western blot - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C Western blot staining using rabbit Anti-KIF5A + KIF5B + KIF5C antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST
Degraded fragment (107 KD) has also been described (PMID: 11144355)

Exposure time: 10 seconds

All lanes:
Western blot - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049) at 1/1000 dilution

Lane 1:
Human cerebellum tissue lysate at 20 µg

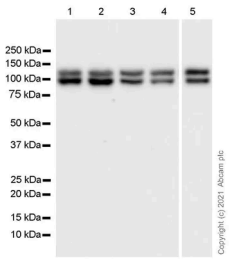
Lane 2:
Human hypothalamus tissue lysate at 20 µg

Secondary

All lanes:
VeriBlot for IP secondary antibody(HRP)(ab131366) at 1/1000 dilution

Predicted band size: 117 kDa

Observed band size: 107 kDa, 117 kDa



Western blot - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

KIF5A + KIF5B + KIF5C Western blot staining using rabbit Anti-KIF5A + KIF5B + KIF5C antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST
Degraded fragment (107 KD) has also been described (PMID: 11144355)

Exposure time: 10 seconds

All lanes:
Western blot - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049) at 1/1000 dilution

Lane 1:
Mouse brain tissue lysate at 20 µg

Lane 2:
Mouse cerebral cortex tissue lysate at 20 µg

Lane 3:
Mouse cerebellum tissue lysate at 20 µg

Lane 4:
Rat brain tissue lysate at 20 µg

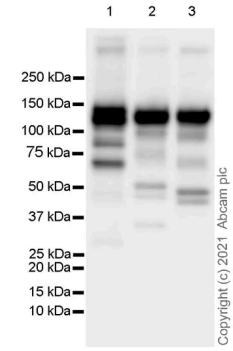
Lane 5:
Rat cerebellum tissue lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 117 kDa

Observed band size: 107 kDa, 117 kDa



Western blot - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049)

Blocking and diluting buffer and concentration: 5% NFDM/TBST
Exposure time: 3 seconds

All lanes:
Western blot - Anti-KIF5A + KIF5B + KIF5C antibody [EPR24325-98] (ab271049) at 1/5000 dilution

Lane 1:
HEK-293T (human embryonic kidney) transfected with KIF5A expression vector containing a myc-His-tag®, whole cell lysate at 2 µg

Lane 2:
HEK-293T transfected with KIF5B expression vector containing a myc-His-tag®, whole cell lysate at 2 µg

Lane 3:
HEK-293T transfected with KIF5C expression vector containing a myc-His-tag®, whole cell lysate at 2 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 117 kDa

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