abcam

Product datasheet

Anti-KIF1A antibody [EPR11790(B)] ab180153

Recombinant RabMAb

★★★★ 1 Abreviews 6 References 11 Images

Overview

Product name Anti-KIF1A antibody [EPR11790(B)]

Description Rabbit monoclonal [EPR11790(B)] to KIF1A

Host species Rabbit

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

Unsuitable for: IHC-P

Species reactivity Reacts with: Rat. Human

Immunogen Synthetic peptide within Human KIF1A aa 900-1000. The exact sequence is proprietary.

Database link: Q12756

Positive control HEK-293 cells, Human fetal brain lysates, SH-SY5Y cells, U-87 MG cells, rat hypothalamus lysate

and rat brain 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 Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EPR11790(B)

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab180153 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)		1/100. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB	★★★★ (1)	1/5000 - 1/10000. Detects a band of approximately 191 kDa (predicted molecular weight: 191 kDa).
ICC/IF		1/100.
IP		1/50.

Application notes

Is unsuitable for IHC-P.

Target

Function Motor for anterograde axonal transport of synaptic vesicle precursors.

Sequence similarities Belongs to the kinesin-like protein family. Unc-104 subfamily.

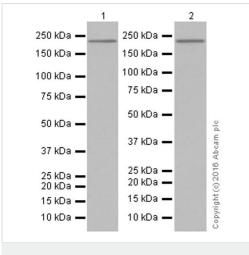
Contains 1 FHA domain.

Contains 1 kinesin-motor domain.

Contains 1 PH domain.

Cellular localization Cytoplasm > cytoskeleton.

Images



Western blot - Anti-KIF1A antibody [EPR11790(B)] (ab180153)

All lanes : Anti-KIF1A antibody [EPR11790(B)] (ab180153) at 1/1000 dilution (purified)

Lane 1: Rat hypothalamus lysate

Lane 2: Rat brain lysate

Lysates/proteins at 15 µg per lane.

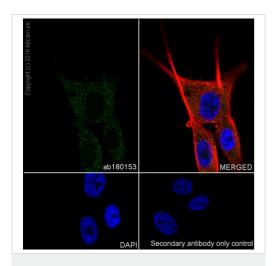
Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000

dilution

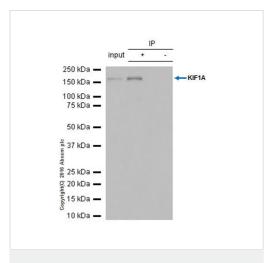
Predicted band size: 191 kDa **Observed band size:** 191 kDa

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

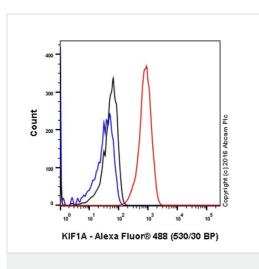


Immunocytochemistry/ Immunofluorescence - Anti-KIF1A antibody [EPR11790(B)] (ab180153)

Immunocytochemistry/Immunofluorescence analysis of U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cells labeling KIF1A with purified ab180153 at 1/100 dilution (9.2 μ g/ml). Cells were fixed in 4% paraformaldehyde and permeabilised with 0.1% tritonX-100. Ab195889, anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used as the secondary antibody at 1/200 dilution (2.5 μ g/ml). DAPI was used as the nuclear counter stain.



Immunoprecipitation - Anti-KIF1A antibody [EPR11790(B)] (ab180153)



Flow Cytometry (Intracellular) - Anti-KIF1A antibody [EPR11790(B)] (ab180153)

ab180153 (purified) at 1/50 dilution
(2ug) immunoprecipitating KIF1A in SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate.

Lane 1 (input): SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate 10ug

Lane 2 (+): ab180153 + SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate 10ug

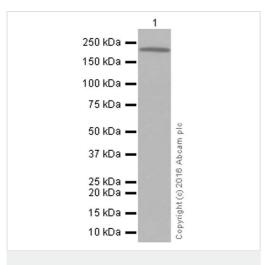
Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab180153 in SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

For western blotting, <u>ab131366</u> VeriBlot for IP Detection Reagent (HRP) was used for detection (1/10000).

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

Intracellular Flow Cytometry analysis of SH-SY5Y (Human neuroblastoma cell line from bone marrow) cells labeling KIF1A with purifiedab180153 at 1/90 dilution (10 ug/ml). Cells were fixed with 4% paraformaldehyde. A goat anti-rabbit lgG (Alexa Fluor® 488) was used as the secondary antibody at 1/2000 dilution. Black - Isotype control, Rabbit monoclonal lgG. Blue - unlabelled control, cells without incubation with primary antibody and secondary antibody.



Western blot - Anti-KIF1A antibody [EPR11790(B)] (ab180153)

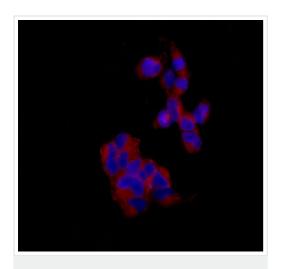
Anti-KIF1A antibody [EPR11790(B)] (ab180153) at 1/10000 dilution (purified) + HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate at 15 μ g

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

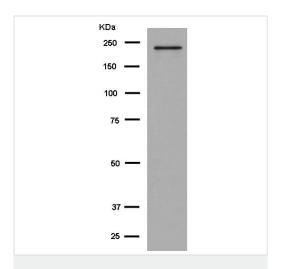
Predicted band size: 191 kDa **Observed band size:** 191 kDa

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



Immunocytochemistry/ Immunofluorescence - Anti-KIF1A antibody [EPR11790(B)] (ab180153)

Immunofluorescent analysis of 4% paraformaldehyde-fixed 293 cells labeling KIF1A with unpurified ab180153 at 1/100 dilution, followed by Goat anti rabbit IgG (Dylight 555) at 1/250 dilution. Counter stained with Dapi.



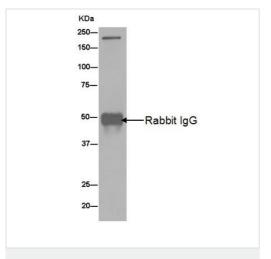
Western blot - Anti-KIF1A antibody [EPR11790(B)] (ab180153)

Anti-KIF1A antibody [EPR11790(B)] (ab180153) at 1/20000 dilution (unpurified) + 293 cell lysate at 10 µg

Secondary

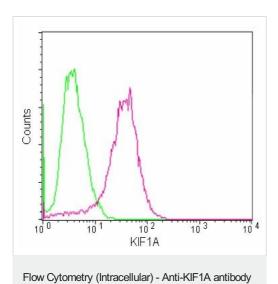
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 191 kDa



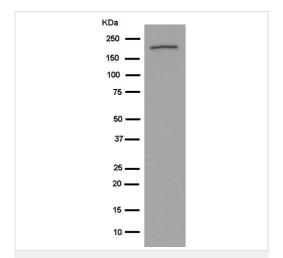
Western blot analysis of 293 cell lysate immunoprecipitated using unpurified ab180153 at 1/30 dilution, followed by Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated secondary antibody at 1/1000 dilution.

Immunoprecipitation - Anti-KIF1A antibody [EPR11790(B)] (ab180153)



[EPR11790(B)] (ab180153)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixedSH-SY5Y cells labeling KIF1A with unpurified ab180153 at 1/150 dilution (red), compared to a Rabbit lgG control (green), followed by Goat anti rabbit lgG (FITC) at 1/75 dilution.



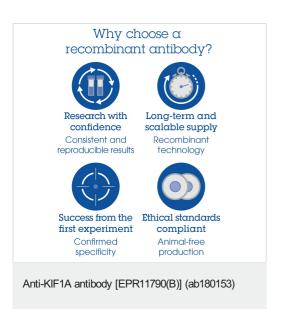
Western blot - Anti-KIF1A antibody [EPR11790(B)] (ab180153)

Anti-KIF1A antibody [EPR11790(B)] (ab180153) at 1/10000 dilution (unpurified) + Human fetal brain lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 191 kDa



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