

Product datasheet

Anti-KIF5B antibody [EPR10277(B)] ab151558

KO VALIDATED Recombinant RabMAb

★★★★★ [1 Abreviews](#) [1 References](#) [6 Images](#)

Overview

Product name	Anti-KIF5B antibody [EPR10277(B)]
Description	Rabbit monoclonal [EPR10277(B)] to KIF5B
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human KIF5B aa 700-800. The exact sequence is proprietary. Database link: P33176
Positive control	Jurkat, HeLa and HepG2 cell lysates; Human colon and uterus tissues.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - 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 -20°C.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR10277(B)
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab151558 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 IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Predicted molecular weight: 111 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

Microtubule-dependent motor required for normal distribution of mitochondria and lysosomes.

Sequence similarities

Belongs to the TRAFAC class myosin-kinesin ATPase superfamily. Kinesin family. Kinesin subfamily.

Contains 1 kinesin motor domain.

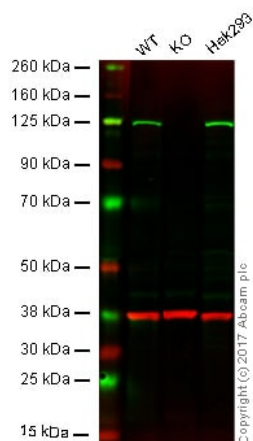
Domain

Composed of three structural domains: a large globular N-terminal domain which is responsible for the motor activity of kinesin (it hydrolyzes ATP and binds microtubule), a central alpha-helical coiled coil domain that mediates the heavy chain dimerization; and a small globular C-terminal domain which interacts with other proteins (such as the kinesin light chains), vesicles and membranous organelles.

Cellular localization

Cytoplasm, cytoskeleton. Uniformly distributed between soma and neurites in hippocampal neurons.

Images



Western blot - Anti-KIF5B antibody [EPR10277(B)]
(ab151558)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)

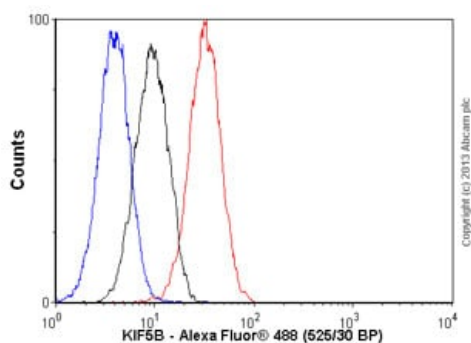
Lane 2: KIF5B knockout HAP1 whole cell lysate (20 µg)

Lane 3: Hek293 whole cell lysate (20 µg)

Lanes 1 - 3: Merged signal (red and green). Green - ab151558 observed at 110 kDa. Red - loading control, [ab9484](#), observed at 37 kDa.

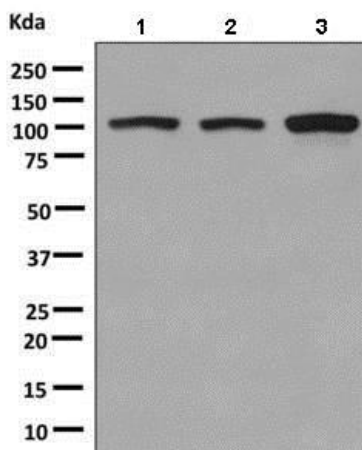
ab151558 was shown to specifically react with KIF5B in wild type cells as signal was lost in KIF5B knockout cells. Wild-type and KIF5B knockout samples were subjected to SDS-PAGE.

Ab151558 and [ab9484](#) (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Flow Cytometry (Intracellular) - Anti-KIF5B antibody
[EPR10277(B)] (ab151558)

Overlay histogram showing HeLa cells stained with ab151558 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab151558, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) ([ab150077](#)) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-KIF5B antibody [EPR10277(B)]
(ab151558)

All lanes : Anti-KIF5B antibody [EPR10277(B)] (ab151558) at 1/1000 dilution

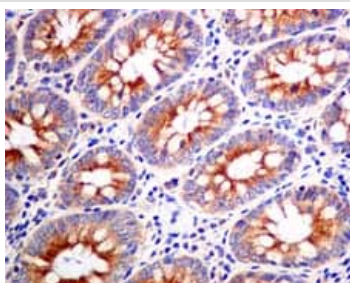
Lane 1 : Jurkat cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

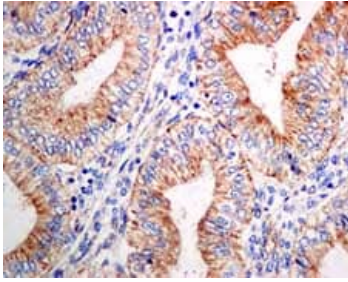
Predicted band size: 111 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KIF5B antibody [EPR10277(B)] (ab151558)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling KIF5B with ab151558 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemical analysis of paraffin-embedded Human uterus tissue labeling KIF5B with ab151558 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KIF5B antibody [EPR10277(B)] (ab151558)

Why choose a recombinant antibody?



Anti-KIF5B antibody [EPR10277(B)] (ab151558)

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