abcam

Product datasheet

Anti-p60 katanin antibody [EPR5071] ab111881

Recombinant RabMAb

4 References 3 Images

Overview

Product name Anti-p60 katanin antibody [EPR5071]

Description Rabbit monoclonal [EPR5071] to p60 katanin

Host species Rabbit

Tested applications Suitable for: WB, ICC/IF

Unsuitable for: Flow Cyt, IHC-P or IP

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa and HepG2 cell lysates. ICC/IF: HeLa cell 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

Purity Protein A purified

Clonality Monoclonal

Clone number EPR5071

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab111881 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
WB		1/1000 - 1/10000. Predicted molecular weight: 56 kDa.
ICC/IF		1/100.

Application notes

Is unsuitable for Flow Cyt,IHC-P or IP.

Target

Function

Severs microtubules in vitro in an ATP-dependent manner. This activity may promote rapid reorganization of cellular microtubule arrays, such as during disassembly of interphase microtubules at the G2-M transition. May also be required for microtubule release from the centrosome after nucleation. In mitotic spindles this could allow depolymerization of the microtubule end proximal to the centrosome, and subsequent poleward microtubule flux. In neurons, microtubule release within the cell body may allow their subsequent transport into neuronal processes by microtubule dependent motor proteins. This transport is required for axonal growth.

Sequence similarities

Belongs to the AAA ATPase family.

Domain

The N-terminus is sufficient for interaction with microtubules, although high affinity binding requires

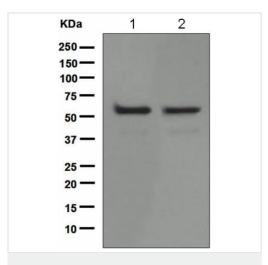
an intact C-terminal domain and ATP, which promotes oligomerization.

Cellular localization

Cytoplasm. Cytoplasm > cytoskeleton > centrosome. Cytoplasm > cytoskeleton > spindle pole.

Predominantly cytoplasmic. Also localized to the interphase centrosome. Enhanced recruitment to the mitotic spindle poles requires microtubules and interaction with KATNB1.

Images



Western blot - Anti-p60 katanin antibody [EPR5071] (ab111881)

All lanes : Anti-p60 katanin antibody [EPR5071] (ab111881) at 1/1000 dilution

Lane 1 : HeLa cell lysate

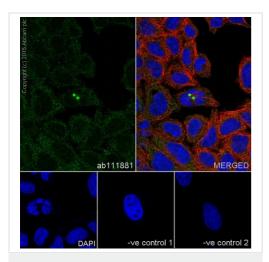
Lane 2 : HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 56 kDa



Immunocytochemistry/ Immunofluorescence - Antip60 katanin antibody [EPR5071] (ab111881)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling p60 katanin with ab111881 at 1/100 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Confocal image showing staining on the centrosome of Hela cells.

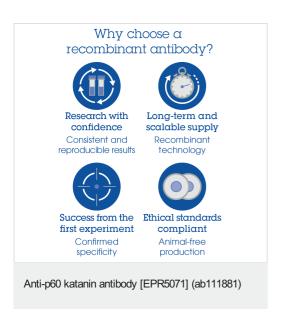
The nuclear counterstain is DAPI (blue).

Tubulin is detected with <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution and <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab111881 at 1/100 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

-ve control 2: <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/1000 dilution.



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