abcam

Product datasheet

Anti-FKBP52 antibody [Hi52C] ab59460

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Overview

Product name Anti-FKBP52 antibody [Hi52C]

Description Mouse monoclonal [Hi52C] to FKBP52

Host species Mouse

Tested applications Suitable for: Flow Cyt, IHC-P, ICC/IF

Species reactivity Reacts with: Mouse, Human

Immunogen Synthetic peptide corresponding to human FKBP52

Positive control IHC-P: Human prostate tissue; Mouse backskin tissue. ICC/IF: HeLa cells. Flow Cyt: HeLa cells.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

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

Storage buffer Preservative: 0.09% Sodium azide

Constituents: PBS, 50% Glycerol

Purity Protein G purified

Clonality Monoclonal

Clone number Hi52C Isotype IgG2a

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab59460 in the following tested applications.

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The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 1-2µg for 10 ⁶ cells. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IHC-P		Use at an assay dependent concentration.
ICC/IF		Use a concentration of 10 µg/ml.

Function

Target

Immunophilin protein with PPlase and co-chaperone activities (By similarity). Component of unliganded steroid receptors heterocomplexes through interaction with heat-shock protein 90 (HSP90). May play a role in the intracellular trafficking of heterooligomeric forms of steroid hormone receptors between cytoplasm and nuclear compartments (By similarity). The isomerase activity controls neuronal growth cones via regulation of TRPC1 channel opening. Acts also as a regulator of microtubule dynamics by inhibiting MAPT/TAU ability to promote microtubule assembly.

Tissue specificity Widely expressed.

Sequence similaritiesContains 2 PPlase FKBP-type domains.

Contains 3 TPR repeats.

Domain The PPlase activity is mainly due to the first PPlase FKBP-type domain (1-138 AA).

The C-terminal region (AA 375-458) is required to prevent tubulin polymerization.

The chaperone activity resides in the C-terminal region, mainly between amino acids 264 and

400.

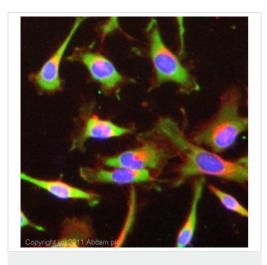
Post-translational modifications

Phosphorylation by CK2 results in loss of HSP90 binding activity (By similarity). Phosphorylated

upon DNA damage, probably by ATM or ATR.

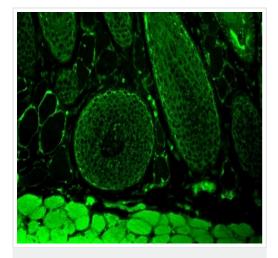
Cellular localization Cytoplasm > cytosol. Nucleus. Cytoplasm > cytoskeleton.

Images



Immunocytochemistry/ Immunofluorescence - Anti-FKBP52 antibody [Hi52C] (ab59460)

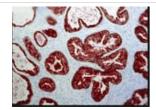
ICC/IF image of ab59460 stained HeLa cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab59460, 10 μ g/ml) overnight at +4°C. The secondary antibody (green) was <code>ab96879</code> Dylight 488 goat anti-mouse lgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 μ M.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FKBP52 antibody
[Hi52C] (ab59460)

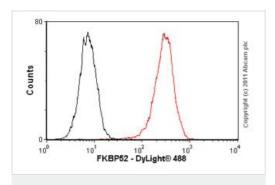
Paraffin-embedded mouse backskin tissue stained for FKBP52 using ab59460 at 1/100 dilution in immunohistochemical analysis.

Fixation: Bouin's Fixative. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1/50 dilution for 1 hour at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FKBP52 antibody
[Hi52C] (ab59460)

ab59460 at 1/100 dilution staining FKBP52 in prostate tissue section by Immunohistochemistry (Bouin's fixative fixed paraffinembedded tissue section). Antigen retrieval was done by microwave in citrate buffer. A HRP conjugated goat anti mouse secondary was used at 1/10 dilution.



Flow Cytometry - Anti-FKBP52 antibody [Hi52C] (ab59460)

Overlay histogram showing HeLa cells stained with ab59460 (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 (ab59460, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Hela cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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