


Product datasheet

Anti-BAF53b antibody [EP10101] ab180927

RabMAb

[2 References](#) [4 Images](#)

Overview

Product name	Anti-BAF53b antibody [EP10101]
Description	Rabbit monoclonal [EP10101] to BAF53b
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human fetal brain lysate; Human and Mouse brain tissues; U87-MG cells.
General notes	<p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>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.</p> <p>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</p>

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	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP10101

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab180927 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. Detects a band of approximately 47 kDa (predicted molecular weight: 47 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/50.

Target

Function

Belongs to the chromatin remodeling brain-specific BAF (bBAF) complex, as such plays a role in remodeling mononucleosomes in an ATP-dependent fashion. Belongs to the neuron-specific chromatin remodeling complex (nBAF complex) and is required for postmitotic neural development and dendritic outgrowth. During neural development a switch from a stem/progenitor to a post-mitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to post-mitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth. ACTL6B/BAF53B is not essential for assembly of the nBAF complex but is required for targeting the complex and CREST to the promoter of genes essential for dendritic growth.

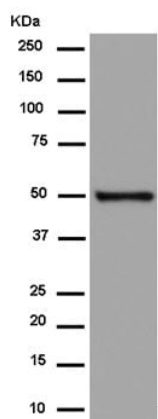
Sequence similarities

Belongs to the actin family.

Cellular localization

Nucleus.

Images



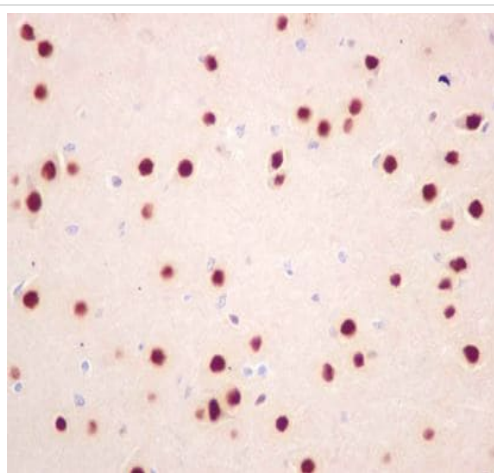
Western blot - Anti-BAF53b antibody [EP10101]
(ab180927)

Anti-BAF53b antibody [EP10101] (ab180927) at 1/5000 dilution +
Human fetal brain lysate at 20 µg

Secondary

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

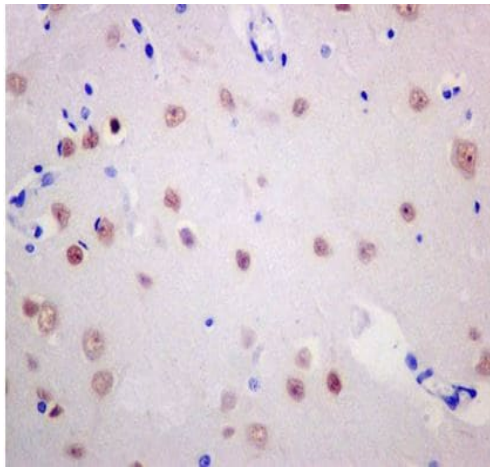
Predicted band size: 47 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-BAF53b antibody
[EP10101] (ab180927)

Immunohistochemical analysis of paraffin-embedded Mouse brain
tissue, labeling BAF53b with ab180927 at 1/500 dilution and
counter-stained with Hematoxylin.

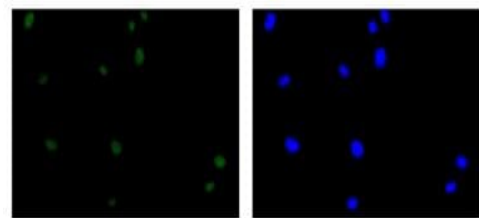
Perform heat mediated antigen retrieval with EDTA buffer pH 9
before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BAF53b antibody [EP10101] (ab180927)

Immunohistochemical analysis of paraffin -embedded Human brain tissue, labeling BAF53b with ab180927 at 1/500 dilution and counter-stained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-BAF53b antibody [EP10101] (ab180927)

Immunofluorescent analysis of U87-MG cells (paraformaldehyde-fixed, 4%) labeling BAF53b with ab180927 at 1//50 dillution followed by Goat anti Rabbit IgG secondary antibody at 1/200 dilution and counter-stained with Dapi (blue).

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