abcam

Product datasheet

Alexa Fluor® 488 Anti-SMARCC1/BAF155 antibody [EPR12395] ab237172

Recombinant

RabMAb

3 Images

Overview

Product name Alexa Fluor® 488 Anti-SMARCC1/BAF155 antibody [EPR12395]

Description Alexa Fluor® 488 Rabbit monoclonal [EPR12395] to SMARCC1/BAF155

Host species Rabbit

Conjugation Alexa Fluor® 488. Ex: 495nm, Em: 519nm

Tested applications Suitable for: ICC, Flow Cyt (Intra)

Species reactivity Reacts with: Human

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

Positive control ICC: HeLa cells. Flow Cyt (intra): Jurkat cells.

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**.

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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. Stable for 12 months at -20°C. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, 68% PBS

Purity Protein A purified

ClonalityMonoclonalClone numberEPR12395

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab237172 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
ICC		1/1000. This product gave a positive signal in HeLa fixed with 4% formaldehyde (10 min).
Flow Cyt (Intra)		1/2500.

Target

Function

Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). May stimulate the ATPase activity of the catalytic subunit of the complex. Also involved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin-remodeling complex recruited by vitamin D receptor (VDR), which is required for the ligand-bound VDR-mediated transrepression of the CYP27B1 gene. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). 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.

Tissue specificity Expressed in brain, heart, muscle, placenta, lung, liver, muscle, kidney and pancreas.

Sequence similarities Belongs to the SMARCC family.

Contains 1 SANT domain.
Contains 1 SWIRM domain.

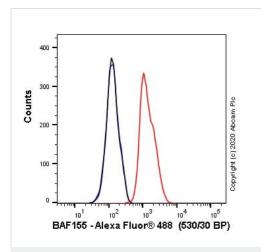
Post-translational modifications

Phosphorylated on undefined residues at the G2/M transition by ERK1 and other kinases. This may contribute to cell cycle specific inactivation of remodeling complexes containing the

phosphorylated protein.

Cellular localization Nucleus.

Images

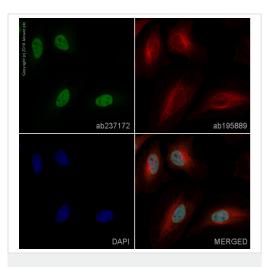


Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-SMARCC1/BAF155 antibody [EPR12395] (ab237172)

Flow cytometry overlay histogram showing Jurkat cells stained with ab237172 (red line). The cells were fixed with 4 % formaldehyde (10 min) and then permeabilized with 0.1 % PBS-Triton X-100 for 15 min. The cells were incubated in 1x PBS containing 10 % normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab237172) (1x 10^6 in 100 μ l at 0.2 μ g/ml (1/2500)) for 30 min at 22°C.

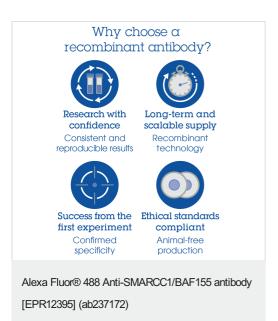
Isotype control antibody (black line) was Rabbit IgG (monoclonal) Alexa Fluor 488[®] (<u>ab199091</u>) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter.



Immunocytochemistry - Alexa Fluor® 488 Anti-SMARCC1/BAF155 antibody [EPR12395] (ab237172)

ab237172 staining SMARCC1 / BAF155 in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab237172 at 1/1000 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor[®] 594), at 1/250 dilution (shown in red). Nuclear DNA was labeled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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