

Product datasheet

Anti-BAF57/SMARCE1 antibody ab228750

5 Images

Overview

Product name	Anti-BAF57/SMARCE1 antibody
Description	Rabbit polyclonal to BAF57/SMARCE1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Chicken, Cow, Xenopus laevis, Zebrafish, Rhesus monkey 
Immunogen	Recombinant fragment within Human BAF57/SMARCE1 (internal sequence). The exact sequence is proprietary. Database link: Q969G3
Positive control	WB: NIH/3T3, IMR32 and Jurkat whole cell lysates. IHC-P: NCI-H1299 xenograft tissue. ICC/IF: MCF7 and HeLa cells.

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: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab228750** 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		1/500 - 1/3000. Predicted molecular weight: 47 kDa.
IHC-P		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.

Target

Function

Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). 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 (By similarity). Required for the coactivation of estrogen responsive promoters by Swi/Snf complexes and the SRC/p160 family of histone acetyltransferases (HATs). Also specifically interacts with the CoREST corepressor resulting in repression of neuronal specific gene promoters in non-neuronal cells. 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.

Sequence similarities

Contains 1 HMG box DNA-binding domain.

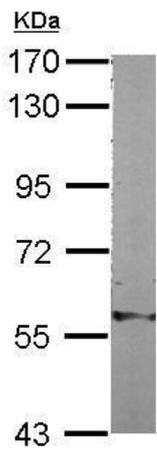
Domain

The HMG domain is essential for CD4 silencing and CD8 activation; mutation of this domain blocks thymus development.

Cellular localization

Nucleus.

Images

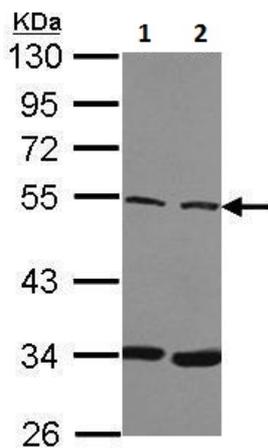


Western blot - Anti-BAF57/SMARCE1 antibody (ab228750)

Anti-BAF57/SMARCE1 antibody (ab228750) at 1/1000 dilution + NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate at 30 µg

Predicted band size: 47 kDa

7.5% SDS-PAGE gel.



Western blot - Anti-BAF57/SMARCE1 antibody (ab228750)

All lanes : Anti-BAF57/SMARCE1 antibody (ab228750) at 1/1000 dilution

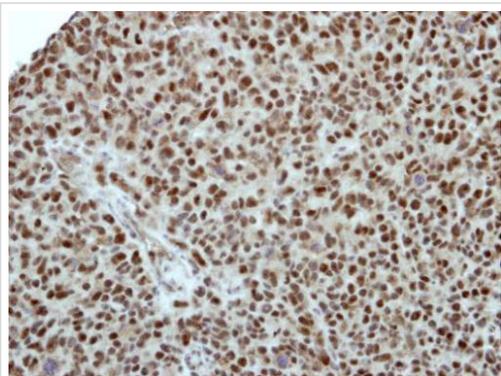
Lane 1 : IMR32 whole cell lysate

Lane 2 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

Lysates/proteins at 30 µg per lane.

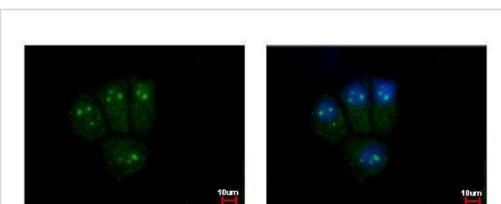
Predicted band size: 47 kDa

10% SDS-PAGE gel.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BAF57/SMARCE1 antibody (ab228750)

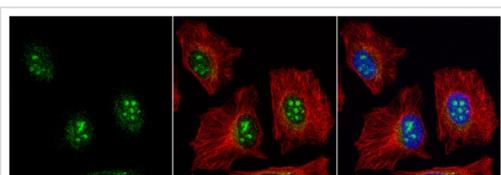
Paraffin-embedded NCI-H1299 (human) xenograft tissue stained for BAF57/SMARCE1 with ab228750 at 1/500 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-BAF57/SMARCE1 antibody (ab228750)

4% paraformaldehyde-fixed MCF7 (human breast adenocarcinoma cell line) cells stained for BAF57/SMARCE1 (green) using ab228750 1/500 dilution in ICC/IF.

Nuclear counterstain: Hoechst 33342 (blue).



Immunocytochemistry/ Immunofluorescence - Anti-BAF57/SMARCE1 antibody (ab228750)

4% paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for BAF57/SMARCE1 (green) using ab228750 1/1000 dilution in ICC/IF.

Nuclear counterstain: Hoechst 33342 (blue). Alpha Tubulin, a cytoskeleton marker, is detected with an alpha Tubulin antibody at 1/500 dilution (red).

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