

Goat Anti-BAF57 / SMARCE1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1137a**Specification**

Goat Anti-BAF57 / SMARCE1 Antibody - Product Information

Application	IHC, WB
Primary Accession	Q969G3
Other Accession	NP_003070 , 6605 , 57376 (mouse)
Reactivity	Human
Predicted	Mouse
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	46649

Goat Anti-BAF57 / SMARCE1 Antibody - Additional Information**Gene ID** 6605**Other Names**

SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily E member 1, BRG1-associated factor 57, BAF57, SMARCE1, BAF57

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-BAF57 / SMARCE1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-BAF57 / SMARCE1 Antibody - Protein Information**Name** SMARCE1**Synonyms** BAF57**Function**

Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Component of SWI/SNF chromatin remodeling complexes that carry out key enzymatic activities, changing chromatin structure by altering

DNA-histone contacts within a nucleosome in an ATP-dependent manner. 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 postmitotic 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 postmitotic 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.

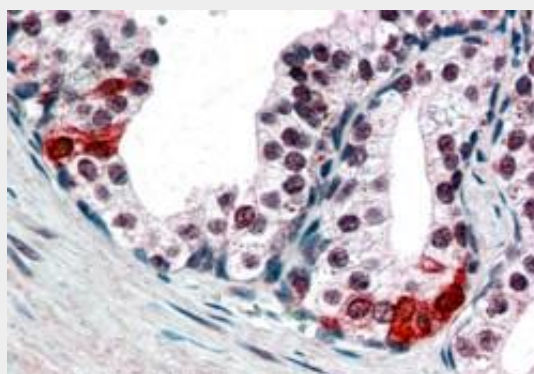
Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00267, ECO:0000269|PubMed:12192000}

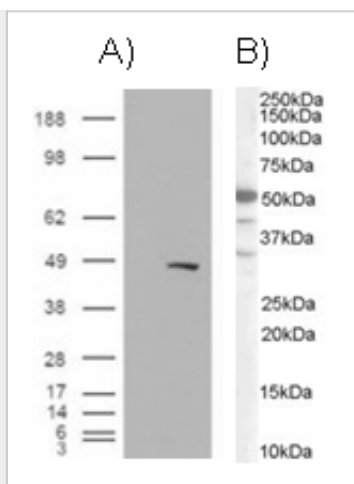
Goat Anti-BAF57 / SMARCE1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-BAF57 / SMARCE1 Antibody - Images

In paraffin embedded Human Prostate shows nuclear staining in secretory epithelial cells. Recommended concentration, 3-5 µg/ml.



A) HEK293 overexpressing BAF57 (RC209444) and probed with AF1137a (mock transfection in first lane), tested by Origene. B) see Western Blot.

Goat Anti-BAF57 / SMARCE1 Antibody - Background

The protein encoded by this gene is part of the large ATP-dependent chromatin remodeling complex SWI/SNF, which is required for transcriptional activation of genes normally repressed by chromatin. The encoded protein, either alone or when in the SWI/SNF complex, can bind to 4-way junction DNA, which is thought to mimic the topology of DNA as it enters or exits the nucleosome. The protein contains a DNA-binding HMG domain, but disruption of this domain does not abolish the DNA-binding or nucleosome-displacement activities of the SWI/SNF complex. Unlike most of the SWI/SNF complex proteins, this protein has no yeast counterpart.

Goat Anti-BAF57 / SMARCE1 Antibody - References

A role for BAF57 in cell cycle-dependent transcriptional regulation by the SWI/SNF chromatin remodeling complex. Hah N, et al. Cancer Res, 2010 Jun 1. PMID 20460533.

Genome-wide association study and meta-analysis find that over 40 loci affect risk of type 1 diabetes. Barrett JC, et al. Nat Genet, 2009 Jun. PMID 19430480.

Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

Cellular transcription modulator SMARCE1 binds to HBV core promoter containing naturally occurring deletions and represses viral replication. Pan H, et al. Biochim Biophys Acta, 2007 Sep. PMID 17669635.

Disrupted in Schizophrenia 1 Interactome: evidence for the close connectivity of risk genes and a potential synaptic basis for schizophrenia. Camargo LM, et al. Mol Psychiatry, 2007 Jan. PMID 17043677.