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 100µg/200µl
Isotype IgG
Calculated MW 46649

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

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

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
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 nBAF 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 - References

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