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

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

- **Name**: SMARCE1
- **Synonyms**: BAF57
- **Function**: Involved in transcriptional activation and repression of select genes by chromatin
- **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 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