

#### SMARCE1 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP14356b

## Specification

# SMARCE1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q969G3</u>

## SMARCE1 Antibody (C-term) Blocking Peptide - 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

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## SMARCE1 Antibody (C-term) Blocking Peptide - 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 (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}

#### SMARCE1 Antibody (C-term) Blocking Peptide - Protocols

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

#### <u>Blocking Peptides</u>

#### SMARCE1 Antibody (C-term) Blocking Peptide - Images

#### SMARCE1 Antibody (C-term) Blocking Peptide - Background

The protein encoded by this gene is part of the largeATP-dependent chromatin remodeling complex SWI/SNF, which isrequired for transcriptional activation of genes normally repressedby chromatin. The encoded protein, either alone or when in theSWI/SNF complex, can bind to 4-way junction DNA, which is thoughtto mimic the topology of DNA as it enters or exits the nucleosome. The protein contains a DNA-binding HMG domain, but disruption of the SWI/SNF complex. Unlikemost of the SWI/SNF complex proteins, this protein has no yeastcounterpart.

#### SMARCE1 Antibody (C-term) Blocking Peptide - References

Hah, N., et al. Cancer Res. 70(11):4402-4411(2010)Barrett, J.C., et al. Nat. Genet. 41(6):703-707(2009)Pan, H., et al. Biochim. Biophys. Acta 1772(9):1075-1084(2007)Camargo, L.M., et al. Mol. Psychiatry 12(1):74-86(2007)Hurst, D.R., et al. Biochem. Biophys. Res. Commun. 348(4):1429-1435(2006)