

(Mouse) Smarcc1 Blocking Peptide (C-term)
Synthetic peptide
Catalog # BP20897c

Specification

(Mouse) Smarcc1 Blocking Peptide (C-term) - Product Information

Primary Accession [P97496](#)
Other Accession [Q92922](#)

(Mouse) Smarcc1 Blocking Peptide (C-term) - Additional Information

Gene ID 20588

Other Names

SWI/SNF complex subunit SMARCC1, BRG1-associated factor 155, SWI/SNF complex 155 kDa subunit, SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily C member 1, SWI3-related protein, BAF155, Smarcc1, Baf155, Srg3

Target/Specificity

The synthetic peptide sequence is selected from aa 783-797 of HUMAN Smarcc1

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.

(Mouse) Smarcc1 Blocking Peptide (C-term) - Protein Information

Name Smarcc1

Synonyms Baf155, Srg3

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. May stimulate the ATPase activity of the catalytic subunit of the complex. 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.

Cellular Location

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q92922}

Tissue Location

Highly expressed in adult brain, testis and thymus.

(Mouse) Smarcc1 Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)

(Mouse) Smarcc1 Blocking Peptide (C-term) - Images**(Mouse) Smarcc1 Blocking Peptide (C-term) - Background**

Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). May stimulate the ATPase activity of the catalytic subunit of the complex. 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 (By similarity). 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.

(Mouse) Smarcc1 Blocking Peptide (C-term) - References

Jeon S.H., et al. J. Exp. Med. 185:1827-1836(1997).
Kim J.K., et al. Mol. Cell. Biol. 21:7787-7795(2001).
Lessard J., et al. Neuron 55:201-215(2007).
Sweet S.M., et al. Mol. Cell. Proteomics 8:904-912(2009).