

**SMARCD3 Blocking Peptide (N-term)**

Synthetic peptide  
Catalog # BP20613a

**Specification**

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**SMARCD3 Blocking Peptide (N-term) - Product Information**

Primary Accession [O6STE5](#)  
Other Accession [O6P9Z1](#)

**SMARCD3 Blocking Peptide (N-term) - Additional Information**

Gene ID 6604

**Other Names**

SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 3, 60 kDa BRG-1/Brm-associated factor subunit C, BRG1-associated factor 60C, BAF60C, SMARCD3, BAF60C

**Target/Specificity**

The synthetic peptide sequence is selected from aa 27-40 of HUMAN SMARCD3

**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.

**SMARCD3 Blocking Peptide (N-term) - Protein Information**

Name SMARCD3

Synonyms BAF60C

**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. Stimulates nuclear receptor mediated transcription. 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).

#### **Cellular Location**

Nucleus.

#### **Tissue Location**

Isoform 2 and isoform 1 are expressed in brain, heart, kidney, placenta, prostate, salivary gland, spleen, testis, thyroid, trachea and uterus. Isoform 1 is also expressed in skeletal muscle and adipose tissue

#### **SMARCD3 Blocking Peptide (N-term) - Protocols**

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

- [Blocking Peptides](#)

#### **SMARCD3 Blocking Peptide (N-term) - Images**

#### **SMARCD3 Blocking Peptide (N-term) - Background**

Plays a role in ATP dependent nucleosome remodeling by SMARCA4 containing complexes. Stimulates nuclear receptor mediated transcription. 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 (By similarity).

#### **SMARCD3 Blocking Peptide (N-term) - References**

Wang W., et al. *Genes Dev.* 10:2117-2130(1996).  
Debril M.-B., et al. *J. Biol. Chem.* 279:16677-16686(2004).  
Hillier L.W., et al. *Nature* 424:157-164(2003).  
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.  
Olsen J.V., et al. *Cell* 127:635-648(2006).