

**(Mouse) Smarcd3 Blocking Peptide (Center)**  
**Synthetic peptide**  
**Catalog # BP21168a**

**Specification**

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**(Mouse) Smarcd3 Blocking Peptide (Center) - Product Information**

Primary Accession [Q6P9Z1](#)

**(Mouse) Smarcd3 Blocking Peptide (Center) - Additional Information**

**Gene ID** 66993

**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, mBAF60c, Smarcd3, Baf60c

**Target/Specificity**

The synthetic peptide sequence is selected from aa 158-173 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.

**(Mouse) Smarcd3 Blocking Peptide (Center) - 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 (PubMed:<a href="http://www.uniprot.org/citations/22952240" target="\_blank">22952240</a>, PubMed:<a href="http://www.uniprot.org/citations/26601204" target="\_blank">26601204</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/17640523" target="\_blank">17640523</a>).

**Cellular Location**

Nucleus {ECO:0000250|UniProtKB:Q6STE5}.

**Tissue Location**

Ubiquitously expressed.

**(Mouse) Smarcd3 Blocking Peptide (Center) - Protocols**

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

- [Blocking Peptides](#)

**(Mouse) Smarcd3 Blocking Peptide (Center) - Images****(Mouse) Smarcd3 Blocking Peptide (Center) - Background**

Plays a role in ATP dependent nucleosome remodeling by SMARCA4 containing complexes. Stimulates nuclear receptor mediated transcription (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) Smarcd3 Blocking Peptide (Center) - References**

Carninci P.,et al.Science 309:1559-1563(2005).  
Debril M.-B.,et al.J. Biol. Chem. 279:16677-16686(2004).  
Lessard J.,et al.Neuron 55:201-215(2007).