

Mouse Smarcd1 Antibody(Center) Blocking peptide
Synthetic peptide
Catalog # BP19639c**Specification**

Mouse Smarcd1 Antibody(Center) Blocking peptide - Product InformationPrimary Accession [Q61466](#)**Mouse Smarcd1 Antibody(Center) Blocking peptide - Additional Information****Gene ID** 83797**Other Names**

SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1, 60 kDa BRG-1/Brm-associated factor subunit A, BRG1-associated factor 60A, BAF60A, Protein D15KZ1, SWI/SNF complex 60 kDa subunit, Smarcd1, Baf60a, D15Kz1

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 Smarcd1 Antibody(Center) Blocking peptide - Protein Information**Name** Smarcd1**Synonyms** Baf60a, D15Kz1**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 (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 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:17640523). Has a strong influence on vitamin D-mediated transcriptional activity from an enhancer vitamin D receptor element (VDRE). May be a link between mammalian SWI-SNF-like chromatin remodeling complexes and the vitamin D receptor (VDR) heterodimer. Mediates critical interactions between nuclear receptors and the BRG1/SMARCA4 chromatin-remodeling complex for transactivation (By similarity).

Cellular Location

Nucleus.

Tissue Location

Ubiquitous.

Mouse Smarcd1 Antibody(Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Mouse Smarcd1 Antibody(Center) Blocking peptide - Images**Mouse Smarcd1 Antibody(Center) Blocking peptide - Background**

Smarcd1 is involved in chromatin remodeling. Has a strong influence on the Vitamin D-mediated transcriptional activity from an enhancer Vitamin D receptor element (VDRE). May be a link between mammalian SWI-SNF-like chromatin remodeling complexes and the vitamin D receptor (VDR) heterodimer. Mediates critical interactions between nuclear receptors and the BRG1/SMARCA4 chromatin-remodeling complex for transactivation. 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 Smarcd1 Antibody(Center) Blocking peptide - References

Guo, G., et al. Dev. Cell 18(4):675-685(2010)Ho, L., et al. Proc. Natl. Acad. Sci. U.S.A. 106(13):5181-5186(2009)Li, S., et al. Cell Metab. 8(2):105-117(2008)Oh, J., et al. J. Biol. Chem. 283(18):11924-11934(2008)Valerius, M.T., et al. Gene Expr. Patterns 8(5):297-306(2008)