

**SMARCD1 Rabbit mAb**  
**Catalog # AP76715****Specification**

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**SMARCD1 Rabbit mAb - Product Information**

Application	<b>WB, IP</b>
Primary Accession	<a href="#">Q96GM5</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Monoclonal Antibody</b>
Calculated MW	<b>58233</b>

**SMARCD1 Rabbit mAb - Additional Information****Gene ID** 6602**Other Names**  
SMARCD1**Dilution**  
WB~~1/500-1/1000  
IP~~N/A**Format**  
Liquid**SMARCD1 Rabbit mAb - Protein Information****Name** SMARCD1 {ECO:0000312|EMBL:AAD23390.1}**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/29374058" target="\_blank">29374058</a>, PubMed:<a href="http://www.uniprot.org/citations/8804307" target="\_blank">8804307</a>). 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). 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 (PubMed:<a href="http://www.uniprot.org/citations/14698202" target="\_blank">14698202</a>). Mediates critical interactions between nuclear receptors and the BRG1/SMARCA4 chromatin-remodeling complex for transactivation (PubMed:<a href="http://www.uniprot.org/citations/12917342" target="\_blank">12917342</a>). Interacts with AKIRIN2 (By similarity).

#### Cellular Location

Nucleus {ECO:0000269|PubMed:8804307, ECO:0000305}

#### Tissue Location

Expressed in all tissues tested, including brain, heart, kidney, liver, lung, muscle, pancreas and placenta

### SMARCD1 Rabbit mAb - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### SMARCD1 Rabbit mAb - Images

