

KD-Validated Anti-SMARCD1 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI2285**Specification****KD-Validated Anti-SMARCD1 Rabbit Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	Q96GM5
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 58 kDa; observed, 58 kDa KDa
Gene Name	SMARCD1
Aliases	SMARCD1; SWI/SNF Related BAF Chromatin Remodeling Complex Subunit D1; BAF60A; SWI/SNF Related, Matrix Associated, Actin Dependent Regulator Of Chromatin, Subfamily D, Member 1; CRACD1; Rsc6p; 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; Mammalian Chromatin Remodeling Complex BRG1-Associated Factor 60A; Chromatin Remodeling Complex BAF60A Subunit; SWI/SNF Complex 60 KDa Subunit A; SWI/SNF Complex 60 KDa Subunit; Swp73-Like Protein; CSS11
Immunogen	A synthesized peptide derived from human SMARCD1

KD-Validated Anti-SMARCD1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	6602
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, SWI/SNF complex 60 kDa subunit, SMARCD1 {ECO:0000312 EMBL:AAD23390.1}

KD-Validated Anti-SMARCD1 Rabbit Monoclonal Antibody - 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:29374058, PubMed:8804307). 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:14698202). Mediates critical interactions between nuclear receptors and the BRG1/SMARCA4 chromatin-remodeling complex for transactivation (PubMed:12917342). Interacts with AKIRIN2 (By similarity).

Cellular Location

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

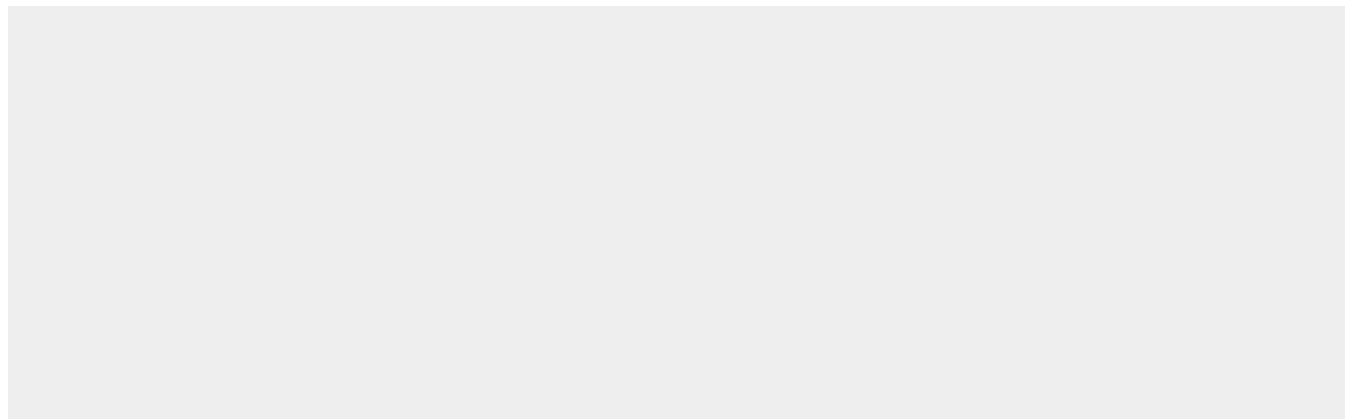
Tissue Location

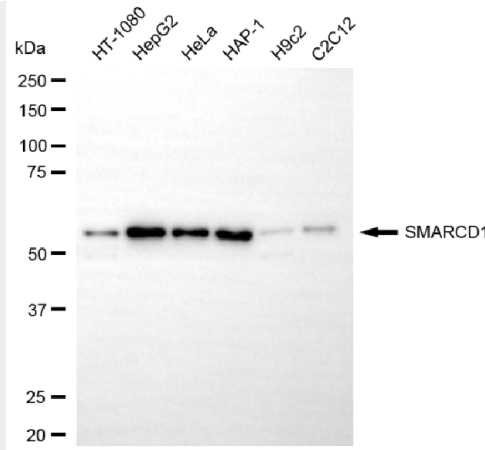
Expressed in all tissues tested, including brain, heart, kidney, liver, lung, muscle, pancreas and placenta

KD-Validated Anti-SMARCD1 Rabbit Monoclonal Antibody - Protocols

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

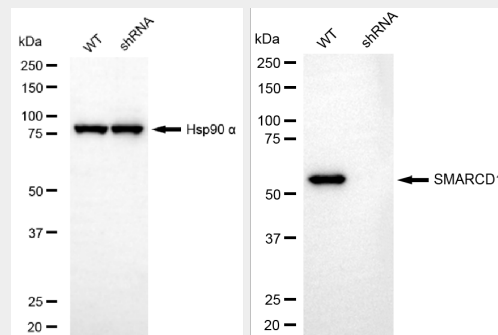
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-SMARCD1 Rabbit Monoclonal Antibody - Images



Copyright ©2025 Genuin Biotechnologies LLC

Western blotting analysis using anti-SMARCD1 antibody (Cat#AGI2285). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-SMARCD1 antibody (Cat#AGI2285, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Copyright ©2025 Genuin Biotechnologies LLC

Western blotting analysis using anti-SMARCD1 antibody (Cat#AGI2285). SMARCD1 expression in wild-type (WT) and SMARCD1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-SMARCD1 antibody (Cat#AGI2285, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.