

KD-Validated Anti-SMARCC1 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1404**Specification**

KD-Validated Anti-SMARCC1 Rabbit Monoclonal Antibody - Product Information

Application	WB, FC, ICC
Primary Accession	Q92922
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 123 kDa , Observed, 155 kDa
Gene Name	KDa
Aliases	SMARCC1 SMARCC1; SWI/SNF Related, Matrix Associated, Actin Dependent Regulator Of Chromatin Subfamily C Member 1; BAF155; CRACC1; SRG3; SWI/SNF-Related Matrix-Associated Actin-Dependent Regulator Of Chromatin Subfamily C Member 1; SWI/SNF Complex Subunit SMARCC1; SWI/SNF Complex 155 KDa Subunit; BRG1-Associated Factor 155; Rsc8; SWI/SNF Related, Matrix Associated, Actin Dependent Regulator Of; Chromatin, Subfamily C, Member 1; Mammalian Chromatin Remodeling Complex BRG1-Associated Factor 155; Chromatin Remodeling Complex BAF155 Subunit; HYC5; SWI3; RSC8
Immunogen	A synthesized peptide derived from human SMARCC1/BAF155

KD-Validated Anti-SMARCC1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	6599
Other Names	
SWI/SNF complex subunit SMARCC1, BRG1-associated factor 155, BAF155, SWI/SNF complex 155 kDa subunit, SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily C member 1, SMARCC1 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=11104), BAF155	

KD-Validated Anti-SMARCC1 Rabbit Monoclonal Antibody - Protein Information**Name** SMARCC1 ([HGNC:11104](#))**Synonyms** BAF155

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. May stimulate the ATPase activity of the catalytic subunit of the complex (PubMed:10078207, PubMed:29374058). 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. Cytoplasm

Tissue Location

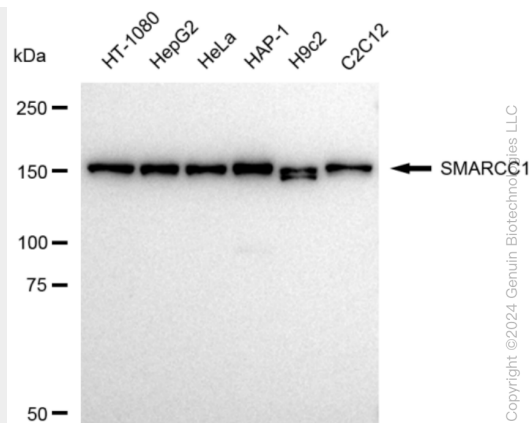
Expressed in brain, heart, muscle, placenta, lung, liver, muscle, kidney and pancreas

KD-Validated Anti-SMARCC1 Rabbit Monoclonal Antibody - Protocols

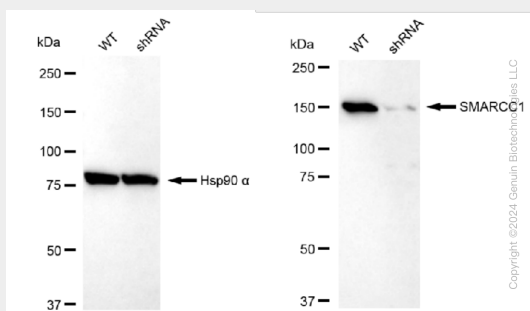
Provided below are standard protocols that you may find useful for product applications.

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

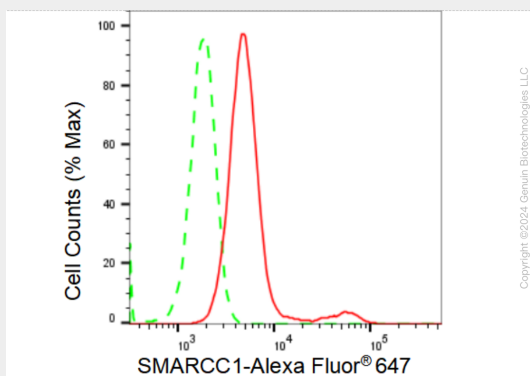
KD-Validated Anti-SMARCC1 Rabbit Monoclonal Antibody - Images



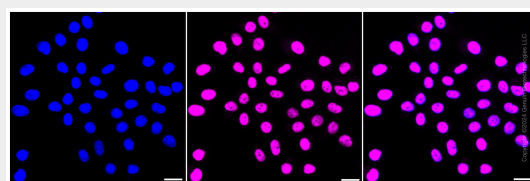
Western blotting analysis using anti-SMARCC1 antibody (Cat#AGI1404). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-SMARCC1 antibody (Cat#AGI1404, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-SMARCC1 antibody (Cat#AGI1404). SMARCC1 expression in wild type (WT) and SMARCC1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-SMARCC1 antibody (Cat#AGI1404, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of SMARCC1 expression in HepG2 cells using SMARCC1 antibody (Cat#AGI1404, 1:2,000). Green, isotype control; red, SMARCC1.



Immunocytochemical staining of HepG2 cells with SMARCC1 antibody (Cat#AGI1404, 1:1,000).

Nuclei were stained blue with DAPI; SMARCC1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μ m.