10320 Camino Santa Fe, Suite G
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# 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 KDa** |
| Gene Name | **SMARCC1** |
| Aliases | **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 (<a href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=11104" target="_blank">HGNC:11104</a>), 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:<a href="http://www.uniprot.org/citations/10078207" target="_blank">10078207</a>, PubMed:<a href="http://www.uniprot.org/citations/29374058" target="_blank">29374058</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).

**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 Cytomety
- Cell Culture

## KD-Validated Anti-SMARCC1 Rabbit Monoclonal Antibody - Images

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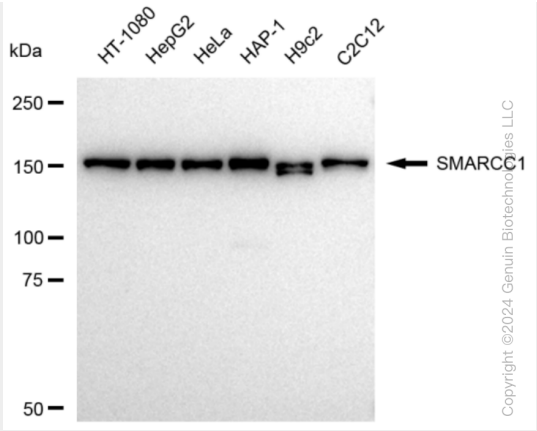
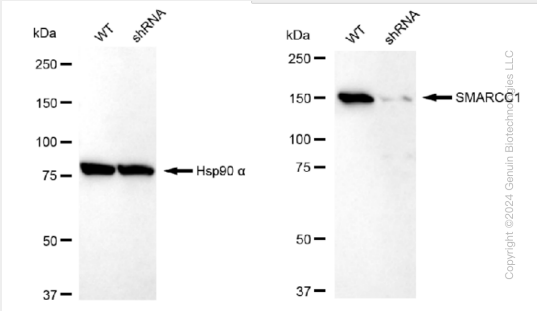
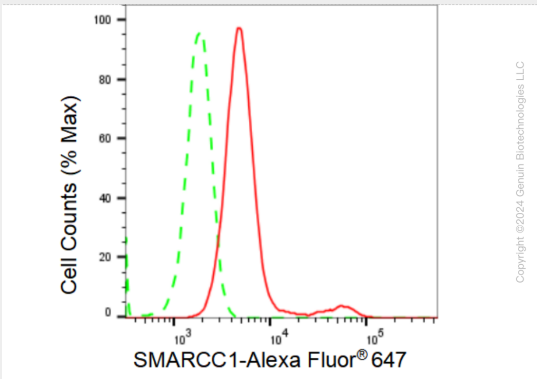


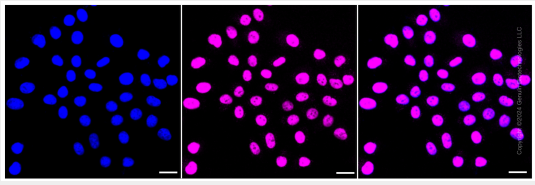

Western blotting analysis using anti-SMARCC1 antibody (Cat#61706). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-SMARCC1 antibody (Cat#61706, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).




Western blotting analysis using anti-SMARCC1 antibody (Cat#61706). 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#61706, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).




Flow cytometric analysis of SMARCC1 expression in HepG2 cells using SMARCC1 antibody (Cat#61706, 1:2,000). Green, isotype control; red, SMARCC1.



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Immunocytochemical staining of HepG2 cells with SMARCC1 antibody (Cat#61706, 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 µm.