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SMARCD3 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20613a

Specification

SMARCD3 Antibody (N-term) - Product Information

Application	**IF, WB,E**
Primary Accession	Q6STE5
Other Accession	Q6P9Z1
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**55016**

SMARCD3 Antibody (N-term) - Additional Information

Gene ID 6604

Other Names
SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 3, 60 kDa BRG-1/Brm-associated factor subunit C, BRG1-associated factor 60C, BAF60C, SMARCD3, BAF60C

Target/Specificity
This SMARCD3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 27-60 amino acids from the N-terminal region of human SMARCD3.

Dilution
IF~~1:25
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SMARCD3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SMARCD3 Antibody (N-term) - Protein Information

Name SMARCD3

Synonyms BAF60C

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. Stimulates nuclear receptor mediated transcription. 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.

Tissue Location
Isoform 2 and isoform 1 are expressed in brain, heart, kidney, placenta, prostate, salivary gland, spleen, testis, thyroid, trachea and uterus. Isoform 1 is also expressed in skeletal muscle and adipose tissue

SMARCD3 Antibody (N-term) - 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

SMARCD3 Antibody (N-term) - Images

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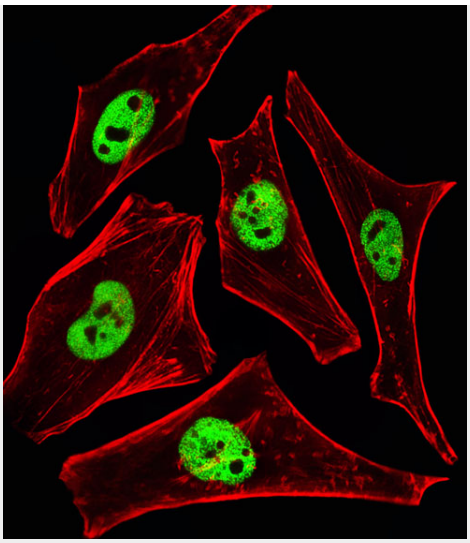
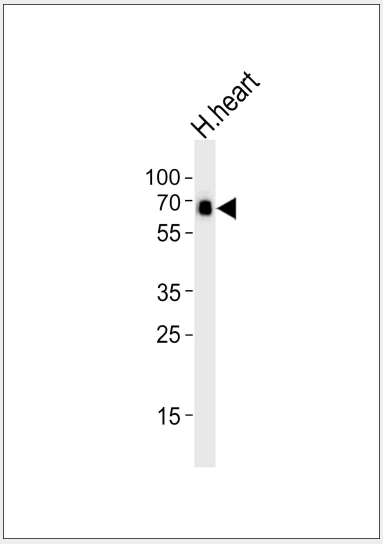


Fluorescent image of Hela cells stained with SMARCD3 Antibody (N-term)(Cat#AP20613a). AP20613a was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Western blot analysis of lysate from human heart tissue lysate, using SMARCD3 Antibody (N-term)(Cat. #AP20613a). AP20613a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

SMARCD3 Antibody (N-term) - Background

Plays a role in ATP dependent nucleosome remodeling by SMARCA4 containing complexes. Stimulates nuclear receptor mediated transcription. 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 (By similarity).

SMARCD3 Antibody (N-term) - References

Wang W.,et al.Genes Dev. 10:2117-2130(1996).
Debril M.-B.,et al.J. Biol. Chem. 279:16677-16686(2004).
Hillier L.W.,et al.Nature 424:157-164(2003).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Olsen J.V.,et al.Cell 127:635-648(2006).