ARG54105
anti-SMARCC1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes BAF155
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Target Name	SMARCC1
Species	Human
Immunogen	Purified recombinant human SMARCC1 protein fragments expressed in E.coli.
Conjugation	Un-conjugated
Alternate Names	SWI/SNF complex subunit SMARCC1; BAF155; BRG1-associated factor 155; SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily C member 1; SWI/SNF complex 155 kDa subunit

Application Instructions

Application table

Application	Dilution
WB	1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Observed Size	155 kDa

Properties

Form	Liquid
Purification	Affinity purified
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	8 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 6599 Human Swiss-port # Q92922 Human
Gene Symbol	SMARCC1
Gene Full Name	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 1
Background	Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology).May stimulate the ATPase activity of the catalytic subunit of the complex.Also involved in vitamin D-coupled transcription regulation via its association with the WINAC complex,a chromatin-remodeling complex recruited by vitamin D receptor (VDR),which is required for the ligand-bound VDR-mediated transrepression of the CYP27B1 gene.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.
Function	Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). May stimulate the ATPase activity of the catalytic subunit of the complex. 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). [UniProt]
Research Area	Gene Regulation antibody
Calculated Mw	123 kDa
PTM	Phosphorylated on undefined residues at the G2/M transition by ERK1 and other kinases. This may contribute to cell cycle specific inactivation of remodeling complexes containing the phosphorylated protein.
Cellular Localization	Nucleus.

Images

ARG54105 anti-SMARCC1 antibody WB image

Western blot: HeLa cell lysate stained with ARG54105 anti-SMARCC1 antibody at 1:1000 dilution.