

BRM Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51528

Specification

BRM Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, E
P51531
Human, Mouse, Rat
Rabbit
Polyclonal
210 KDa

BRM Antibody - Additional Information

Gene ID 6595

Other Names

Probable global transcription activator SNF2L2, 364-, ATP-dependent helicase SMARCA2, BRG1-associated factor 190B, BAF190B, Protein brahma homolog, hBRM, SNF2-alpha, SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A member 2, SMARCA2, BAF190B, BRM, SNF2A, SNF2L2

Dilution

WB~~1:1000 E~~N/A

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C.Stable for 12 months from date of receipt

BRM Antibody - Protein Information

Name SMARCA2 (HGNC:11098)

Function

ATPase 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. Binds DNA non-specifically (PubMed:15075294, PubMed:22952240, PubMed:26601204). 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. Note=Localizes to sites of DNA damage

BRM 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

BRM Antibody - Images

BRM Antibody - Background

Transcriptional coactivator cooperating with nuclear hormone receptors to potentiate transcriptional activation. 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).

BRM Antibody - References

Muchardt C.,et al.EMBO J. 12:4279-4290(1993). Chiba H.,et al.Nucleic Acids Res. 22:1815-1820(1994). Humphray S.J.,et al.Nature 429:369-374(2004). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Kitagawa H.,et al.Cell 113:905-917(2003).