

Goat anti-BRM Antibody

Peptide-affinity purified goat antibody Catalog # AF4522a

Product Information

Application IF, Pep-ELISA Primary Accession P51531

Other Accession NP 003061.3, NP 620614.2

Reactivity Human, Rat
Host Goat
Clonality Polyclonal
Clone Names SMARCA2
Calculated MW 181279

Additional Information

Gene ID 6595

Other Names SWI/SNF related, matrix associated, actin dependent regulator of chromatin,

subfamily a, member 2; BAF190; BRM; FLJ36757; MGC74511; SNF2; SNF2L2

; SNF2LA; SWI2; Sth1p; hBRM; hSNF2a; SNF2-alpha; SNF2-like 2;

SNF2/SWI2-like protein 2; SWI/SNF-re

Dilution IF~~1:50~200 Pep-ELISA~~N/A

Format Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5%

bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and

thawing.

Immunogen This antibody is expected to recognise both reported isoforms (NP_003061.3;

NP 620614.2)

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Goat anti-BRM Antibody is for research use only and not for use in diagnostic

or therapeutic procedures.

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:<u>15075294</u>, PubMed:<u>22952240</u>, PubMed:<u>26601204</u>). 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.