



Anti-SMARCE1 (aa 399-410) polyclonal antibody (DPABH-05021)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). 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). Required for the coactivation of estrogen responsive promoters by Swi/Snf complexes and the SRC/p160 family of histone acetyltransferases (HATs). Also specifically interacts with the CoREST corepressor resulting in repression of neuronal specific gene promoters in non-neuronal cells. 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.
Immunogen	Synthetic peptide: PPTDPIPEDEKK with a Cysteine residue linker, corresponding to C terminal amino acids 399-410 of Human BAF57/SMARCE1 (NP_003070.3).
Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Purification	Protein G purified

Conjugate	Unconjugated
Applications	WB, ELISA, IHC-P
Format	Liquid
Size	50 µg
Buffer	pH: 7.30; Constituents: 0.5% BSA, Tris buffered saline
Preservative	0.02% Sodium Azide
Storage	Store at 4°C short term (1-2 weeks). Aliquot and store at -20°C long term. Avoid repeated freeze / thaw cycles.

GENE INFORMATION

Gene Name	SMARCE1 SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 2 [Homo sapiens]
Official Symbol	SMARCE1
Synonyms	SMARCE1; SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1; BAF57; SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily E member 1; BRG1-associated factor 57; chromatin remodeling complex BRG1-associated factor 57; SWI/SNF-related matrix-associated actin-dependent regulator of chromatin e1;
Entrez Gene ID	6605
Protein Refseq	NP_003070.3
UniProt ID	A0A024R1S7
Pathway	Androgen receptor signaling pathway; TNF-alpha/NF-κB Signaling Pathway;
Function	N-acetyltransferase activity; RNA binding; contributes_to RNA polymerase II core promoter proximal region sequence-specific DNA binding; contributes_to RNA polymerase II distal enhancer sequence-specific DNA binding