



# 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.

<b>Immunogen</b>	Synthetic peptide: PPTDPIPEDEKK with a Cysteine residue linker, corresponding to C terminal amino acids 399-410 of Human BAF57/SMARCE1 (NP_003070.3).
<b>Isotype</b>	IgG
<b>Source/Host</b>	Goat
<b>Species Reactivity</b>	Human
<b>Purification</b>	Protein G purified

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

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">SMARCE1 SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 2 [ Homo sapiens ]</a>
<b>Official Symbol</b>	SMARCE1
<b>Synonyms</b>	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;
<b>Entrez Gene ID</b>	<a href="#">6605</a>
<b>Protein Refseq</b>	<a href="#">NP_003070.3</a>
<b>UniProt ID</b>	<a href="#">A0A024R1S7</a>
<b>Pathway</b>	Androgen receptor signaling pathway; TNF-alpha/NF-kB Signaling Pathway;
<b>Function</b>	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