

Datasheet for ABIN7172403

**anti-SMARCA4 antibody (AA 808-1092)**[Go to Product page](#)**2** Images

## Overview

Quantity:	100 µg
Target:	SMARCA4
Binding Specificity:	AA 808-1092
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMARCA4 antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

## Product Details

Immunogen:	Recombinant Human Transcription activator BRG1 protein (808-1092AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

## Target Details

Target:	SMARCA4
Alternative Name:	SMARCA4 ( <a href="#">SMARCA4 Products</a> )
Background:	Background: Transcriptional coactivator cooperating with nuclear hormone receptors to potentiate transcriptional activation. Component of the CREST-BRG1 complex, a multiprotein

complex that regulates promoter activation by orchestrating a calcium-dependent release of a repressor complex and a recruitment of an activator complex. In resting neurons, transcription of the c-FOS promoter is inhibited by BRG1-dependent recruitment of a phospho-RB1-HDAC repressor complex. Upon calcium influx, RB1 is dephosphorylated by calcineurin, which leads to release of the repressor complex. At the same time, there is increased recruitment of CREBBP to the promoter by a CREST-dependent mechanism, which leads to transcriptional activation. The CREST-BRG1 complex also binds to the NR2B promoter, and activity-dependent induction of NR2B expression involves a release of HDAC1 and recruitment of CREBBP. 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. SMARCA4/BAF190A may promote neural stem cell self-renewal/proliferation by enhancing Notch-dependent proliferative signals, while concurrently making the neural stem cell insensitive to SHH-dependent differentiating cues (By similarity). Acts as a corepressor of ZEB1 to regulate E-cadherin transcription and is required for induction of epithelial-mesenchymal transition (EMT) by ZEB1.

Aliases: ATP dependent helicase SMARCA4 antibody, ATP-dependent helicase SMARCA4 antibody, BAF 190 antibody, BAF190 antibody, BAF190A antibody, Brahma protein like 1 antibody, BRG1 antibody, BRG1 associated factor 190A antibody, BRG1 protein antibody, BRG1-associated factor 190A antibody, BRM/SWI2 related gene 1 antibody, Global transcription activator homologous sequence antibody, global transcription activator snf2l4 antibody, Homeotic gene regulator antibody, hSNF2b antibody, Mitotic growth and transcription activator antibody, MRD16 antibody, Nuclear protein GRB1 antibody, Protein brahma homolog 1 antibody, Protein BRG-1 antibody, Protein BRG1 antibody, RTPS2 antibody, SMARC A4 antibody, SMARCA4 antibody, SMCA4\_HUMAN antibody, SNF2 antibody, SNF2 beta antibody, SNF2 like 4 antibody, SNF2-beta antibody, SNF2B antibody, SNF2L4 antibody, SNF2LB antibody, Sucrose nonfermenting like 4 antibody, SWI/SNF related matrix associated actin dependent regulator of chromatin subfamily A member 4 antibody, SWI/SNF related, matrix associated, actin

## Target Details

dependent regulator of chromatin, subfamily a, member 4 antibody, SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A member 4 antibody, SWI2 antibody, Transcription activator BRG1 antibody

UniProt:	<a href="#">P51532</a>
Pathways:	<a href="#">Intracellular Steroid Hormone Receptor Signaling Pathway</a> , <a href="#">Regulation of Intracellular Steroid Hormone Receptor Signaling</a> , <a href="#">Stem Cell Maintenance</a>

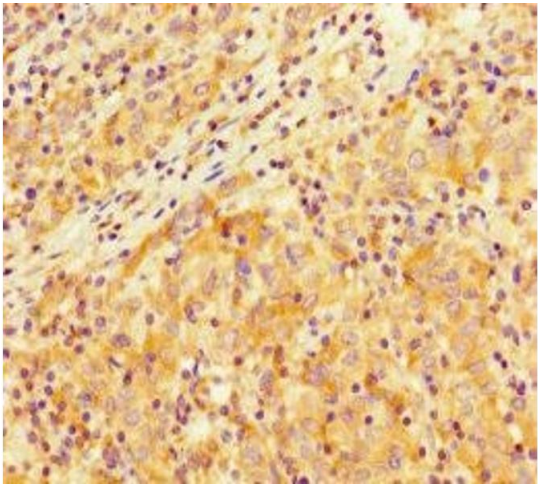
## Application Details

Application Notes:	Recommended dilution: IHC:1:20-1:200, IF:1:50-1:200,
Restrictions:	For Research Use only

## Handling

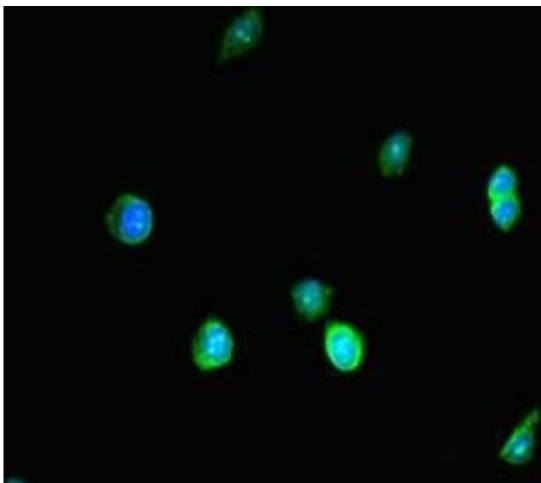
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

## Images



### Immunohistochemistry

**Image 1.** Immunohistochemistry of paraffin-embedded human lung cancer using ABIN7172403 at dilution of 1:100



#### Immunofluorescence

**Image 2.** Immunofluorescent analysis of HepG2 cells using ABIN7172403 at dilution of 1: 100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)