Datasheet for ABIN7183049

anti-BAF53A antibody

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Overview

Quantity:	100 µL
Target:	BAF53A
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This BAF53A antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	Synthesized peptide derived from internal of Human ACL6A.
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Target Details

Target:	BAF53A
Alternative Name:	ACTL6A (BAF53A Products)
Background:	Background: Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Required for maximal ATPase activity of SMARCA4/BRG1/BAF190A and for association of the SMARCA4/BRG1/BAF190A containing

remodeling complex BAF with chromatin/nuclear matrix. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and is required for the proliferation of neural progenitors. 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. Component of the NuA4 histone acetyltransferase (HAT) complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage. 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. Putative core component of the chromatin remodeling INO80 complex which is involved in transcriptional regulation, DNA replication and probably DNA repair.

Zhao K., Cell 95:625-636(1998).
Harata M., Biosci. Biotechnol. Biochem. 63:917-923(1999).
Wiemann S., Genome Res. 11:422-435(2001).

Aliases: 53 kDa BRG1 associated factor A antibody, 53 kDa BRG1-associated factor A antibody, ACL6A_HUMAN antibody, Actin like 6A antibody, Actin like protein 6A antibody, Actin related protein 4 antibody, Actin related protein antibody, Actin related protein Baf53a antibody, Actin-like protein 6A antibody, Actin-related protein Baf53a antibody, ACTL 6 antibody, ACTL 6A antibody, ACTL6 antibody, ACTL6A antibody, Arp4 antibody, ARPN BETA antibody, ArpNbeta antibody, BAF 53A antibody, BAF complex 53 kDa subunit antibody, BAF53 antibody, BAF53A antibody, BRG1 associated factor antibody, BRG1-associated factor 53A antibody, hArpN beta antibody, INO80 complex subunit K antibody, INO80K antibody, MGC5382 antibody

Target Details

UniProt:	O96019
Pathways:	Chromatin Binding, Photoperiodism

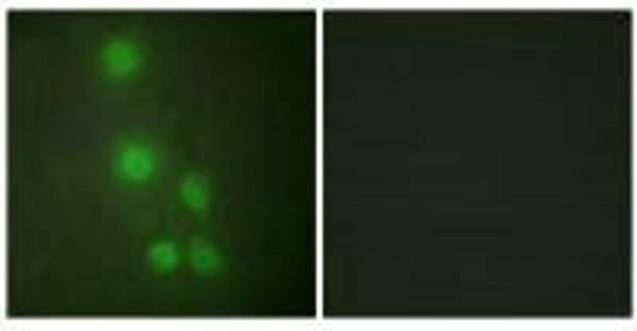
Application Details

Application Notes:	WB:1:500-1:3000, IF:1:100-1:500,
Restrictions:	For Research Use only

Handling

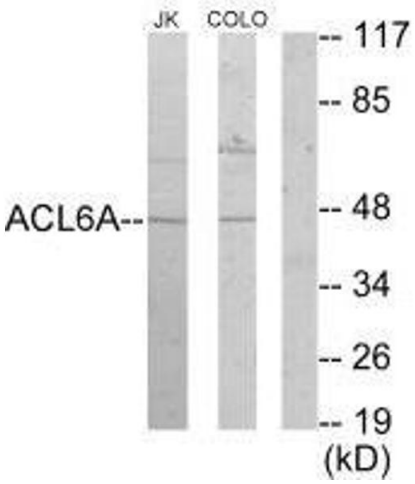
Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunofluorescence

Image 1. Immunofluorescence analysis of HUVEC cells, using ACL6A antibody.



Western Blotting

Image 2. Western blot analysis of extracts from Jurkat cells and COLO205 cells, using ACL6A antibody.