

## ACL6A Antibody

Catalog No: #33644

Package Size: #33644-1 50ul #33644-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

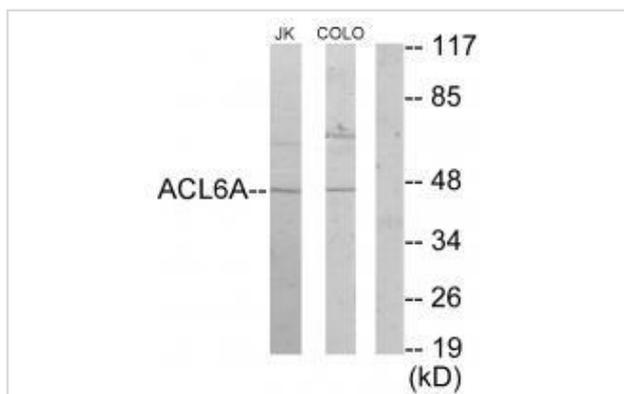
Product Name	ACL6A Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of total ACL6A protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human ACL6A.
Target Name	ACL6A
Other Names	ACTL6; ACTL6A; MGC5382; actin-like 6A;
Accession No.	Swiss-Prot: O96019NCBI Gene ID: 86
Uniprot	O96019
GeneID	86;
SDS-PAGE MW	47kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

## Application Details

Western blotting: 1:500~1:3000

Immunofluorescence: 1:100~1:500

## Images



Western blot analysis of extracts from Jurkat cells and COLO205 cells, using ACL6A antibody #33644.

Immunofluorescence analysis of HUVEC cells, using ACL6A antibody #33644.



## 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).

Note: This product is for in vitro research use only