

## Product datasheet

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# ARG55386 anti-ACTL6A / BAF53A antibody

Package: 100 μl Store at: -20°C

## **Summary**

Product Description Rabbit Polyclonal antibody recognizes ACTL6A / BAF53A

Tested Reactivity Hu, Ms

Tested Application ICC/IF, IHC-P, WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name ACTL6A / BAF53A

Species Mouse

Immunogen KLH-conjugated synthetic peptide corresponding to aa. 295-320 (C-terminus) of Mouse ACTL6A /

BAF53A.

Conjugation Un-conjugated

Alternate Names BAF53A; ACTL6; 53 kDa BRG1-associated factor A; ARPN-BETA; Actin-related protein Baf53a;

BRG1-associated factor 53A; INO80K; Actin-like protein 6A; Arp4; INO80 complex subunit K; ArpNbeta

## **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:25
	IHC-P	1:25
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	K562	

## **Properties**

Form Liquid

Purification Purification with Protein A and immunogen peptide.

Buffer PBS and 0.09% (W/V) Sodium azide

Preservative 0.09% (W/V) Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links <u>GeneID: 56456 Mouse</u>

GeneID: 86 Human

Swiss-port # 096019 Human

Swiss-port # Q9Z2N8 Mouse

Gene Symbol Actl6a

Gene Full Name actin-like 6A

Function 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. 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

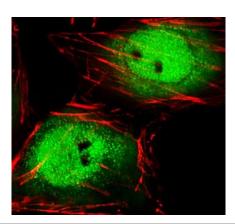
transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage. 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. Proposed core component of the chromatin remodeling INO80 complex which is involved in transcriptional regulation, DNA replication and probably DNA repair (By similarity). [UniProt]

Research Area Signaling Transduction antibody

Calculated Mw 47 kDa

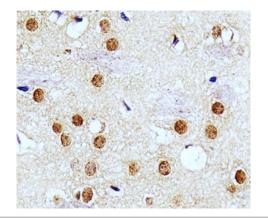
Cellular Localization Nucleus.

## **Images**



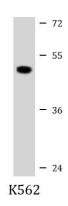
#### ARG55386 anti-ACTL6A / BAF53A antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG55386 anti-ACTL6A / BAF53A antibody (green) at 1:25 dilution. Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



## ARG55386 anti-ACTL6A / BAF53A antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse brain section stained with ARG55386 anti-ACTL6A / BAF53A antibody at 1:25 dilution.



## ARG55386 anti-ACTL6A / BAF53A antibody WB image

Western blot: 20  $\mu g$  of K562 cell lysate stained with ARG55386 anti-ACTL6A / BAF53A antibody at 1:1000 dilution.