Datasheet for ABIN6243024

anti-BAF53A antibody (C-Term)

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Overview

Quantity:	400 µL
Target:	BAF53A
Binding Specificity:	AA 295-320, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This BAF53A antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This Mouse Actl6a antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 295-320 amino acids from the C-terminal region of Mouse Actl6a.
Clone:	RB51048
Isotype:	Ig Fraction
Predicted Reactivity:	Pr
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	BAF53A

Target Details

Alternative Name:	Actl6a (BAF53A Products)
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. 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 (By similarity). 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).
Molecular Weight:	47448
UniProt:	Q9Z2N8
Pathways:	Chromatin Binding, Photoperiodism

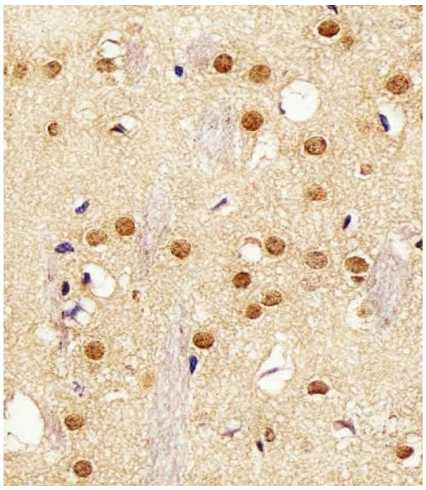
Application Details

Application Notes:	IF: 1:25. WB: 1:1000. IHC-P: 1:25
Restrictions:	For Research Use only

Handling

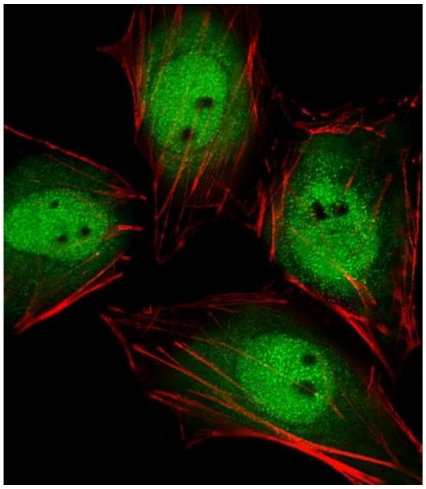
Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Expiry Date:	6 months

Images



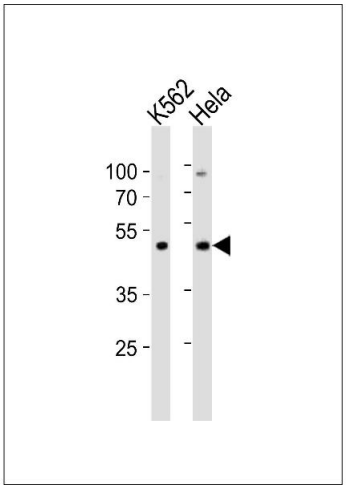
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Immunohistochemical analysis of paraffin-embedded M. brain section using Mouse Actl6a Antibody (C-term) (ABIN6243024 and ABIN6577692). (ABIN6243024 and ABIN6577692) was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Immunofluorescence

Image 2. Fluorescent image of Hela cells stained with Mouse Actl6a Antibody (C-term) (ABIN6243024 and ABIN6577692). (ABIN6243024 and ABIN6577692) was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Western Blotting

Image 3. Western blot analysis of lysates from K562, Hela cell line (from left to right), using Actl6a Antibody (C-term) (ABIN6243024 and ABIN6577692). (ABIN6243024 and ABIN6577692) was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20 µg per lane.

