

anti- ACTL6A antibody

Product Information

Catalog No.: FNab00118

Size: 100μg Form: liquid

Purification: Immunogen affinity purified

Purity: ≥95% as determined by SDS-PAGE

Host: Rabbit

Clonality: polyclonal

Clone ID: None IsoType: IgG

Storage: PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12

months (Avoid repeated freeze / thaw cycles.)

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 progenitorsspecific 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

1

Wuhan Fine Biotech Co., Ltd.

B9 Bld, High-Tech Medical Devices Park, No. 818 GaoxinAve.East Lake High-Tech Development Zone.Wuhan, Hubei, China(430206)

Tel:(0086)027-87384275 Fax: (0086)027-87800889 <u>www.fn-test.com</u>



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. Putative core component of the chromatin remodeling INO80 complex which is involved in transcriptional regulation, DNA replication and probably DNA repair.

Immunogen information

Immunogen: actin-like 6A

Synonyms: Actin like 6A, Actin like protein 6A, Actin related protein Baf53a,

ACTL6, ACTL6A, Arp4, ARPN BETA, ArpNbeta, BAF53, BAF53A, BRG1 associated factor 53A, INO80 complex subunit K, INO80K

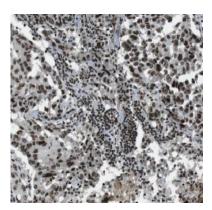
Observed MW: 47 kDa UniprotID: 096019

Application

Reactivity: Human, Mouse, Rat Tested Application: ELISA, WB, IHC, IP

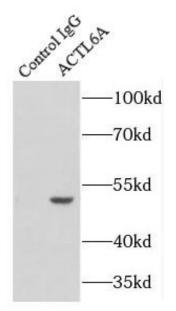
Recommended dilution: WB: 1:500-1:5000; IHC: 1:20-1:200; IP: 1:200-1:2000

Image:

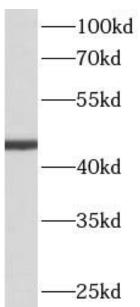


Immunohistochemistry of paraffin-embedded human ovary using FNab00118(ACTL6A antibody) at dilution of 1:50





IP Result of anti-ACTL6A (IP:FNab00118, 4ug; Detection:FNab00118 1:500) with HeLa cells lysate 1200ug.



K-562 cells were subjected to SDS PAGE followed by western blot with FNab00118(ACTL6A antibody) at dilution of 1:1000

3

Wuhan Fine Biotech Co., Ltd.

B9 Bld, High-Tech Medical Devices Park, No. 818 GaoxinAve. East Lake High-Tech Development Zone. Wuhan, Hubei, China (430206)

Tel: (0086)027-87384275 Fax: (0086)027-87800889 www.fn-test.com