

## ACTL6B Polyclonal Antibody

Catalog No: #42057

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## Description

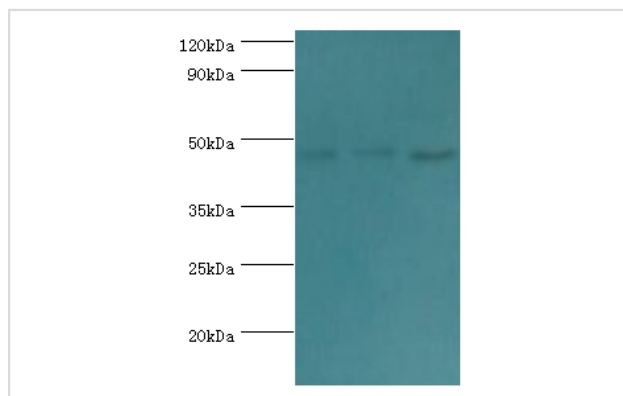
Product Name	ACTL6B Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antigen Affinity Purified
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total ACTL6B polyclonal antibody.
Immunogen Type	protein
Immunogen Description	Recombinant human Actin-like protein 6B protein(1-280aa)
Target Name	ACTL6B
Other Names	53 kDa BRG1-associated factor B, Actin-related protein Baf53b, ArpNalpha, BRG1-associated factor 53B, BAF53B, ACTL6B, ACTL6, BAF53B
Accession No.	Swiss-Prot#: O94805
Uniprot	O94805
GeneID	51412;
Calculated MW	47kd
Concentration	1.0mg/mL
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage	Store at -20°C

## Application Details

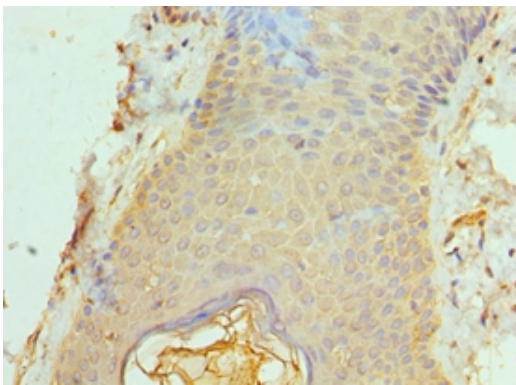
Western blotting: □1:500 - 1:1000

Immunohistochemistry: 1:20 - 1:200

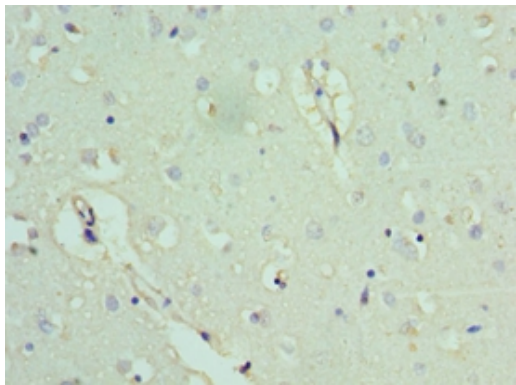
## Images



All lanes: Actin-like protein 6B antibody at 3ug/ml  
Lane 1: Hela whole cell lysate  
Lane 2: U251 whole cell lysate  
Lane 3: HepG2 whole cell lysate  
secondary  
Goat polyclonal to rabbit at 1/10000 dilution  
predicted band size :47kDa  
observed band size :47kDa



Immunohistochemical analysis of paraffin-embedded human skin using #42057 at dilution of 1:100.



Immunohistochemical analysis of paraffin-embedded human brain using #42057 at dilution of 1:100.

## Background

Belongs to the chromatin remodeling brain-specific BAF (bBAF) complex, as such plays a role in remodeling mononucleosomes in an ATP-dependent fashion. Belongs to the neuron-specific chromatin remodeling complex (nBAF complex) and is required for postmitotic neural development and dendritic outgrowth. 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. ACTL6B/BAF53B is not essential for assembly of the nBAF complex but is required for targeting the complex and CREST to the promoter of genes essential for dendritic growth .

## References

[1]The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC)." The MGC Project Team *Genome Res.* 14:2121-2127(2004). [2]Complete sequencing and characterization of 21,243 full-length human cDNAs." Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R., Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H., Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S. Sugano S. *Nat. Genet.* 36:40-45(2004). [3]Identification of a polymorphic, neuron-specific chromatin remodeling complex." Olave I., Wang W., Xue Y., Kuo A., Crabtree G.R. *Genes Dev.* 16:2509-2517(2002).

Note: This product is for in vitro research use only