For Research Use Only

PHF10 Monoclonal antibody

Catalog Number:66341-1-Ig 4 Publications

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Basic Information

Catalog Number:
66341-1-Ig

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG19096

GenBank Accession Number:
BC020954

GeneID (NCBI):
55274

UNIPROT ID:
Q8WUB8

Full Name:
PHD finger protein 10

Calculated MW:
408 aa, 46 kDa

Observed MW:
56 kDa, 35 kDa

Purification Method:
Protein G purification

CloneNo.:
4D4C6

Recommended Dilutions:
WB: 1:500-1:2000
IHC: 1:50-1:500

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB, IF, CoIP

Species Specificity:
human, mouse

Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : fetal human brain tissue, HEK-293 cells, Neuro-2a cells

IHC : human gliomas tissue,

Background Information

PHF10, also named as BRG1-associated factor 45a, is a 498 amino acid protein, which locate in the nucleus and Belongs to the SAYP family. PHF10 Involve in transcription activity regulation by chromatin remodeling. It 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. PHF10 exists as several isoform and the calculated molecular weight of each isoform is 42 kDa, 37 kDa, 51 kDa, and 56 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Yanchen Ma	34724258	Glia	WB
Dominika Letkova	41068120	Nat Commun	WB
Yuliang Feng	37739089	Gastroenterology	IF

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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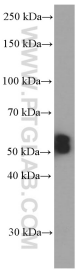
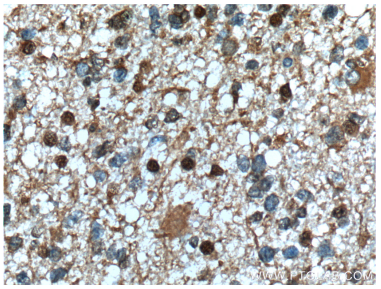
Selected Validation Data



fetal human brain tissue were subjected to SDS PAGE followed by western blot with 66341-1-Ig (PHF10 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 66341-1-Ig (PHF10 Antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).