

For Research Use Only

OPTN Polyclonal antibody

Catalog Number: 10837-1-AP

Featured Product

96 Publications



Basic Information

Catalog Number:

10837-1-AP

Size:

150ul, Concentration: 850 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1272

GenBank Accession Number:

BC013876

GeneID (NCBI):

10133

UNIPROT ID:

Q96CV9

Full Name:

optineurin

Calculated MW:

66 kDa

Observed MW:

66-70 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:12000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

Applications

Tested Applications:

WB, IP, FC, IHC, ELISA

Cited Applications:

WB, IP, IF, IHC, CoIP

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse, hamster, pig

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 : HeLa cells, mouse brain tissue, rat brain tissue

IP : mouse brain tissue,

IHC : human gliomas tissue,

Background Information

OPTN, also named as FIP2, GLC1E, HIP7, HYPL and NRP, plays a neuroprotective role in the eye and optic nerve. It is probably part of the TNF-alpha signaling pathway that can shift the equilibrium toward induction of cell death. OPTN may act by regulating membrane trafficking and cellular morphogenesis via a complex that contains Rab8 and huntingtin (HD). OPTN may constitute a cellular target for adenovirus E3 14.7, an inhibitor of TNF-alpha functions, thereby affecting cell death. Defects in OPTN are the cause of primary open angle glaucoma type 1E (GLC1E). Defects in OPTN are a cause of susceptibility to normal pressure glaucoma (NPG). OPTN mutated in adult-onset primary open angle glaucoma. It supports the protective role of OPTN in the trabecular meshwork. OPTN has 3 isoforms with MW 66,65 and 60 kDa (refer to UniProt). Catalog# 10837-1-AP recognises 66 and 70-74 kDa band, and the additional 70-74 kDa band due to phosphorylation.

Notable Publications

Author	Pubmed ID	Journal	Application
Dulcemaria Hernandez	36154443	mBio	IF
Shanshan Li	33014158	Oncol Lett	WB
Liangde Zheng	31525119	Autophagy	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

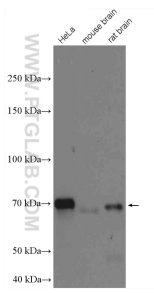
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

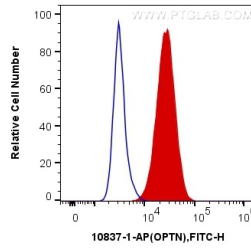
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

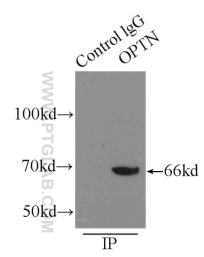
Selected Validation Data



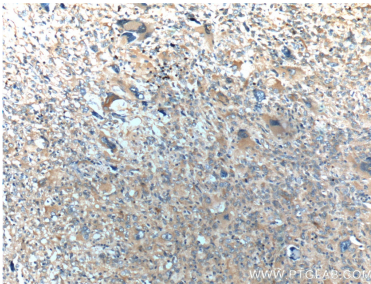
various lysates were subjected to SDS PAGE followed by western blot with 10837-1-AP (OPTN antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



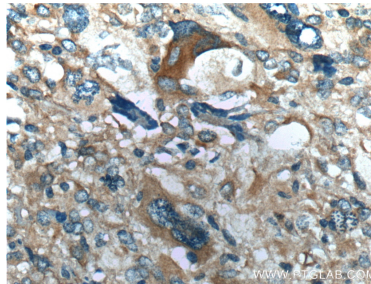
1×10^6 HeLa cells were intracellularly stained with 0.4 μ g Anti-Human OPTN (10837-1-AP) and CoraLite[®]488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 μ g Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



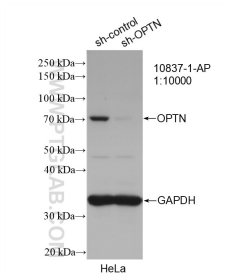
IP result of anti-OPTN (IP:10837-1-AP, 3 μ g; Detection:10837-1-AP 1:800) with mouse brain tissue lysate 8000 μ g.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 10837-1-AP (OPTN Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 10837-1-AP (OPTN Antibody) at dilution of 1:200 (under 40x lens).



WB result of OPTN antibody (10837-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-OPTN transfected HeLa cells.