

For Research Use Only

# OPTN/Optineurin Polyclonal antibody

Catalog Number: 10837-1-AP

Featured Product

113 Publications



## Basic Information

### Catalog Number:

10837-1-AP

### Concentration:

850 ug/ml

### 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 1:5000-1:50000

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

IHC 1:50-1:500

IF-P 1:50-1:500

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, monkey, hamster

**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, HepG2 cells, NCCIT cells

**IP** : mouse brain tissue,

**IHC** : human gliomas tissue,

**IF-P** : rat eye tissue,

**IF/ICC** : MCF-7 cells,

## 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 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

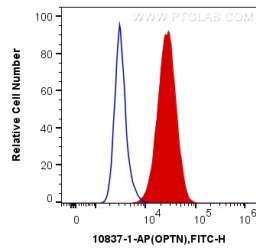
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

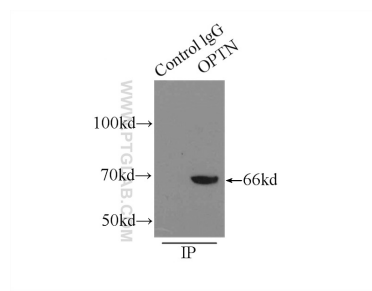
W: [ptgcn.com](http://ptgcn.com)

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

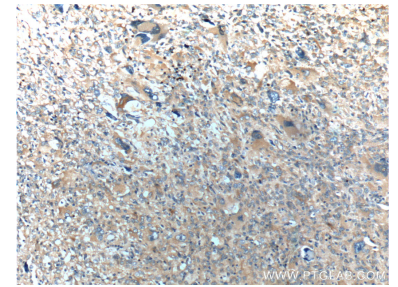
## Selected Validation Data



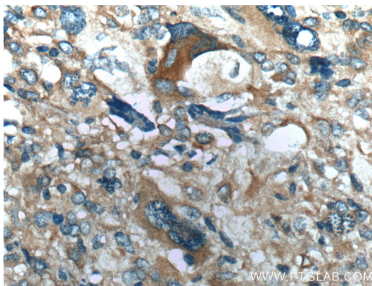
1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human OPTN (10837-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



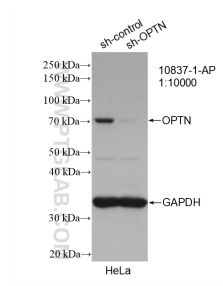
IP result of anti-OPTN (IP:10837-1-AP, 3ug; Detection:10837-1-AP 1:800) with mouse brain tissue lysate 8000ug.



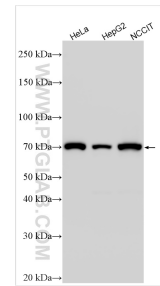
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 10837-1-AP (OPTN Antibody) at dilution of 1:200 (under 10x lens).



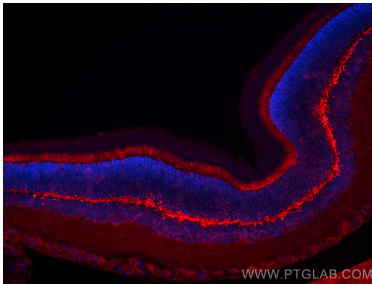
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 10837-1-AP (OPTN Antibody) at dilution of 1:200 (under 40x lens).



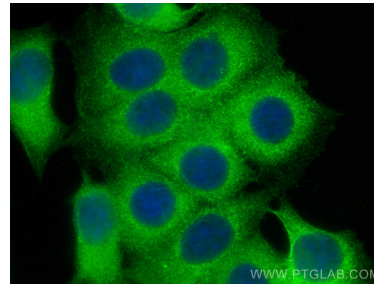
WB result of OPTN antibody (10837-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-OPTN transfected HeLa cells.



Various lysates were subjected to SDS PAGE followed by western blot with 10837-1-AP (OPTN/Optineurin antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Acetone) fixed paraffin-embedded rat eye tissue using OPTN antibody (10837-1-AP) at dilution of 1:200 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using OPTN antibody (10837-1-AP) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).