### For Research Use Only

# **OPTN Polyclonal antibody**

Catalog Number: 10837-1-AP

**Featured Product** 

95 Publications



**Basic Information** 

Catalog Number: 10837-1-AP

Size: 850 μg/ml Source: Rabbit Isotype:

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 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500

**Applications** 

**Tested Applications:** FC, IHC, IP, WB, ELISA Cited Applications:

CoIP, IF, IHC, IP, WB 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 hungtingtin (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 adultonset 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

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

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

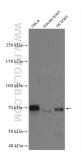
Aliquoting is unnecessary for -20°C storage

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

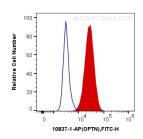
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

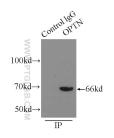
## **Selected Validation Data**



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.



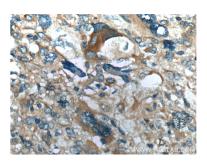
1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human OPTN (10837-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



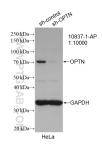
IP result of anti-OPTN (IP:10837-1-AP, 3ug; Detection:10837-1-AP 1:800) with mouse brain tissue lysate 8000ug.



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



Immunohistochemical analysis of paraffinembedded 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.