

For Research Use Only

OPTN/Optineurin Polyclonal antibody

Catalog Number: 10837-1-AP

Featured Product

123 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

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

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

Cited Applications:

WB, IHC, IF, IP, CoIP, IHC-IF

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: HeLa cells,

IHC: human gliomas tissue,

IF-P: rat eye tissue,

IF/ICC: MCF-7 cells,

FC (Intra): HeLa 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- α 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- α 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:

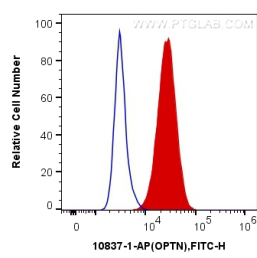
T: 4006900926

E: Proteintech-CN@ptglab.com

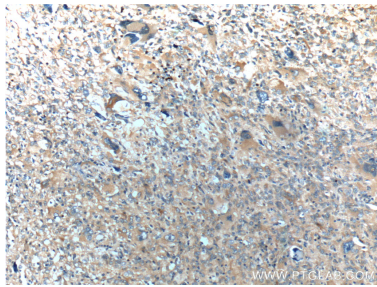
W: ptgcn.com

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

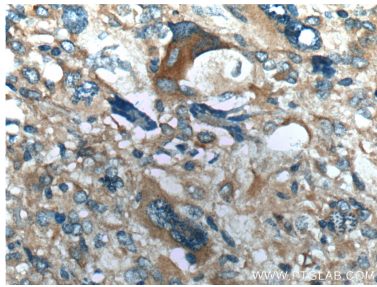
Selected Validation Data



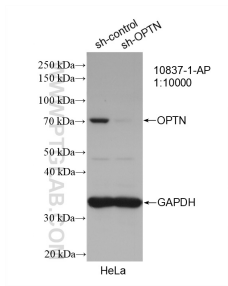
1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human OPTN (10837-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



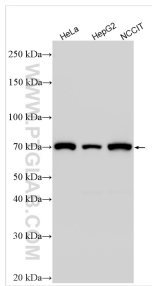
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 10837-1-AP (OPTN Antibody) at dilution of 1:200 (under 10x lens).



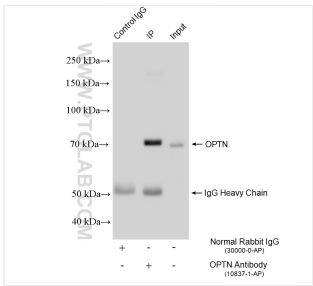
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 10837-1-AP (OPTN Antibody) at dilution of 1:200 (under 40x lens).



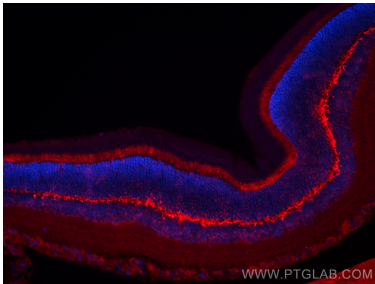
WB result of OPTN antibody (10837-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-OPTN transfected HeLa cells.



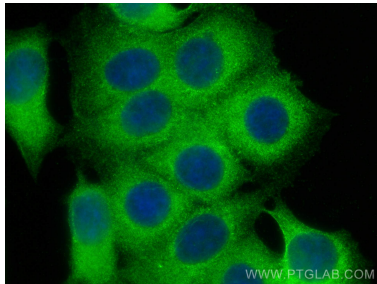
Various lysates were subjected to SDS PAGE followed by western blot with 10837-1-AP (OPTN/Optineurin antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



IP result of anti-OPTN/Optineurin (IP:10837-1-AP, 4ug; Detection:10837-1-AP 1:10000) with HeLa cells lysate 1400 ug.



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).