

OPTN Polyclonal antibody

Catalog Number: 10837-1-AP

Featured Product

95 Publications

Basic Information

Catalog Number: 10837-1-AP	GenBank Accession Number: BC013876	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 850 µg/ml by Nanodrop;	GeneID (NCBI): 10133	Recommended Dilutions: WB 1:2000-1:12000
Source: Rabbit	Full Name: optineurin	IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
Isotype: IgG	Calculated MW: 66 kDa	IHC 1:50-1:500
Immunogen Catalog Number: AG1272	Observed MW: 66-70 kDa	

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

Positive Controls:

WB : HeLa cells, mouse brain tissue, rat brain tissue

IP : mouse brain tissue,

IHC : human gliomas tissue,

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

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 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**

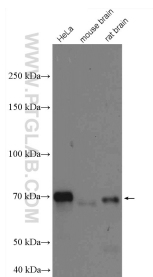
For technical support and original validation data for this product please contact:

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

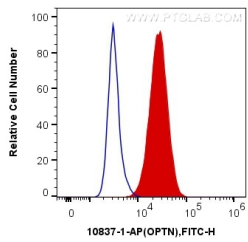
E: proteintech@ptglab.com
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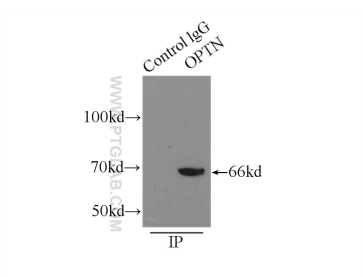
Selected Validation Data



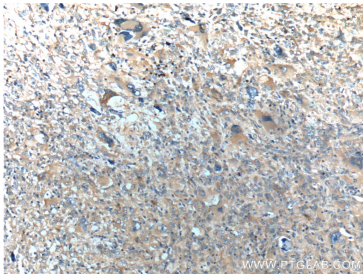
various lysates were subjected to SDS PAGE followed by western blot with 10837-1-AP (OPTN antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



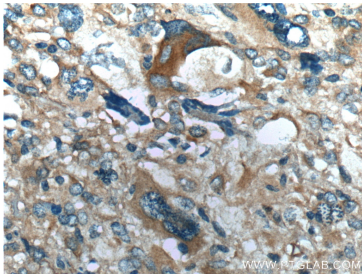
1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human OPTN (10837-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



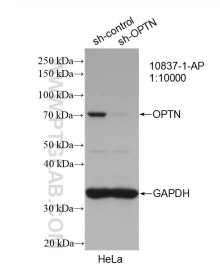
IP Result of anti-OPTN (IP:10837-1-AP, 3ug; Detection:10837-1-AP 1:800) with mouse brain tissue lysate 8000ug.



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.