### For Research Use Only

# **OPTN Monoclonal antibody**

Catalog Number:60293-1-lg Featured Product

2 Publications



**Basic Information** 

Catalog Number: 60293-1-lg Size:

2000 μg/ml Source: Mouse Isotype: lgG1

Immunogen Catalog Number:

AG1272

GenBank Accession Number:

BC013876 GeneID (NCBI): 10133 **UNIPROT ID:** Q96CV9

optineurin Calculated MW: 66 kDa

Full Name:

Observed MW: 70-74 kDa

**Purification Method:** 

Protein A purification

CloneNo.: 6C1H4

Recommended Dilutions: WB 1:500-1:2000

IHC 1:50-1:500 IF 1:50-1:500

**Applications** 

**Tested Applications:** IF/ICC, IHC, WB, ELISA

Cited Applications: IF. WB

Species Specificity:

human **Cited Species:** 

human

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: human heart tissue,

IHC: human pancreas cancer tissue, human brain

IF: HepG2 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 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.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Deguan Lv	35659339	Dev Cell	WB,IF
Qian Xue	36622894	Autophagy	WB

Storage

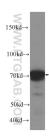
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

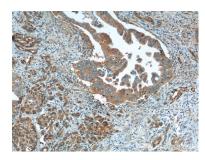
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

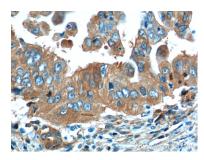
## **Selected Validation Data**



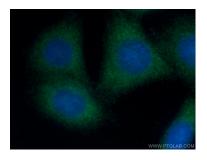
human heart tissue were subjected to SDS PAGE followed by western blot with 60293-1-1g (OPTN Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 60293-1-Ig (OPTN Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 60293-1-Ig (OPTN Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 60293-1-1g (OPTN antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).