

For Research Use Only

# OPTN Recombinant antibody

Catalog Number:83634-5-RR



## Basic Information

<b>Catalog Number:</b> 83634-5-RR	<b>GenBank Accession Number:</b> BC013876	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 10133	<b>CloneNo.:</b> 240636A7
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q96CV9	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> optineurin	
<b>Immunogen Catalog Number:</b> AG1272	<b>Calculated MW:</b> 66 kDa	
	<b>Observed MW:</b> 66-70 kDa	

## Applications

**Tested Applications:**  
WB, IHC, FC (Intra), ELISA

**Species Specificity:**  
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 :** A431 cells, HeLa cells, human testis 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 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 cause primary open angle glaucoma type 1E (GLC1E). Defects in OPTN cause 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.

## 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

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

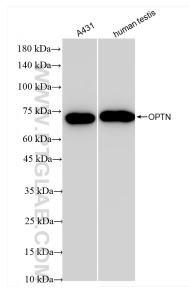
T: 4006900926

E: Proteintech-CN@ptglab.com

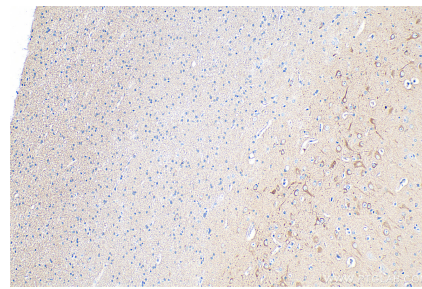
W: ptgcn.com

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

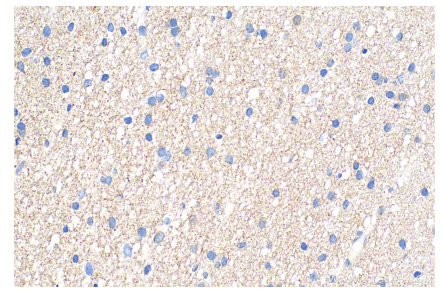
## Selected Validation Data



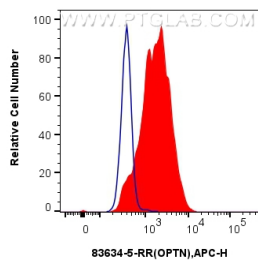
Various lysates were subjected to SDS PAGE followed by western blot with 83634-5-RR (OPTN antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



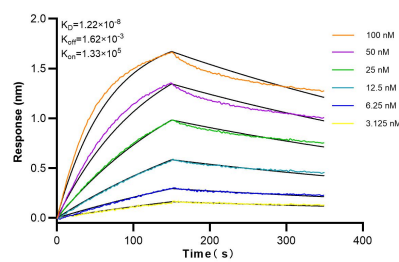
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 83634-5-RR (OPTN antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 83634-5-RR (OPTN antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25 ug OPTN Recombinant antibody (83634-5-RR, Clone:240636A7) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biacore interferometry (BLI) kinetic assays of 83634-5-RR against Human OPTN were performed. The affinity constant is 12.2 nM.