

## **Optineurin Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55234

## **Specification**

## **Optineurin Polyclonal Antibody - Product Information**

Application IHC-P, WB
Primary Accession Q96CV9
Reactivity Rat, Bovine
Host Rabbit
Clonality Polyclonal
Calculated MW 65922

## **Optineurin Polyclonal Antibody - Additional Information**

### Gene ID 10133

### **Other Names**

Optineurin, E3-14.7K-interacting protein, FIP-2, Huntingtin yeast partner L, Huntingtin-interacting protein 7, HIP-7, Huntingtin-interacting protein L, NEMO-related protein, Optic neuropathy-inducing protein, Transcription factor IIIA-interacting protein, TFIIIA-IntP, OPTN, FIP2, GLC1E, HIP7, HYPL, NRP

### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### **Storage**

Store at -20  $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4  $^{\circ}$ C.

## **Optineurin Polyclonal Antibody - Protein Information**

## **Name OPTN**

### **Function**

Plays an important role in the maintenance of the Golgi complex, in membrane trafficking, in exocytosis, through its interaction with myosin VI and Rab8 (PubMed:<a href="http://www.uniprot.org/citations/27534431" target="\_blank">27534431</a>). Links myosin VI to the Golgi complex and plays an important role in Golgi ribbon formation (PubMed:<a href="http://www.uniprot.org/citations/27534431" target="\_blank">27534431</a>). Plays a role in the activation of innate immune response during viral infection. Mechanistically, recruits TBK1 at the Golgi apparatus, promoting its trans-phosphorylation after RLR or TLR3 stimulation (PubMed:<a href="http://www.uniprot.org/citations/27538435" target="\_blank">27538435</a>). In turn, activated TBK1 phosphorylates its downstream partner IRF3 to produce IFN-beta/IFNB1. Plays a neuroprotective role in the eye and optic nerve. May act by regulating membrane trafficking and cellular morphogenesis via a complex that contains Rab8 and hungtingtin (HD). Mediates the interaction of Rab8 with the probable GTPase-activating protein TBC1D17 during Rab8-mediated endocytic trafficking, such as that of transferrin receptor (TFRC/TfR); regulates





Rab8 recruitment to tubules emanating from the endocytic recycling compartment (PubMed:<a href="http://www.uniprot.org/citations/22854040" target="\_blank">22854040</a>). Autophagy receptor that interacts directly with both the cargo to become degraded and an autophagy modifier of the MAP1 LC3 family; targets ubiquitin- coated bacteria (xenophagy), such as cytoplasmic Salmonella enterica, and appears to function in the same pathway as SQSTM1 and CALCOCO2/NDP52.

### **Cellular Location**

Cytoplasm, perinuclear region. Golgi apparatus. Golgi apparatus, trans-Golgi network Cytoplasmic vesicle, autophagosome. Cytoplasmic vesicle. Recycling endosome. Note=Found in the perinuclear region and associates with the Golgi apparatus (PubMed:27534431) Colocalizes with MYO6 and RAB8 at the Golgi complex and in vesicular structures close to the plasma membrane. Localizes to LC3-positive cytoplasmic vesicles upon induction of autophagy

### Tissue Location

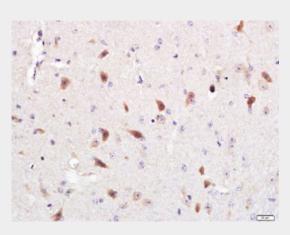
Present in aqueous humor of the eye (at protein level). Expressed in the trabecular meshwork (at protein level) (PubMed:11834836, PubMed:12379221, PubMed:12646749). Expressed in nonpigmented ciliary epithelium (at protein level) (PubMed:11834836) Expressed at high levels in skeletal muscle, also detected in heart, brain, pancreas, kidney, placenta and liver (PubMed:9488477). Expressed in dermal fibroblasts (at protein level) (PubMed:11834836)

## **Optineurin Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

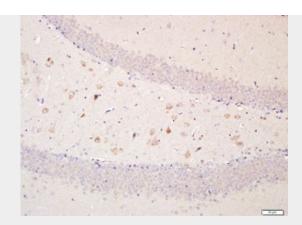
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Optineurin Polyclonal Antibody - Images

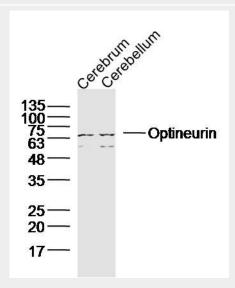


Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Optineurin) Polyclonal Antibody, Unconjugated (bs-13658R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.





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# Sample:

Cerebrum (Mouse) Lysate at 40 ug Cerebellum (Mouse) Lysate at 40 ug

Primary: Anti-Optineurin(bs-13658R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 66kD Observed band size: 66kD