

KD-Validated Anti-Optineurin Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2284

Product Information

Application	WB
Primary Accession	Q96CV9
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB4715
Calculated MW	65922
Gene Name	OPTN
Aliases	OPTN; Optineurin; FIP-2; FIP2; HYPL; HIP7; NRP; TFIIIA-INTP; GLC1E; Transcription Factor IIIA-Interacting Protein; Optic Neuropathy-Inducing Protein; Huntingtin-Interacting Protein 7; Huntingtin-Interacting Protein L; E3-14.7K-Interacting Protein; Huntingtin Yeast Partner L; HIP-7; Tumor Necrosis Factor Alpha-Inducible Cellular Protein Containing Leucine Zipper Domains; Transcription Factor IIIA-Interacting Protein; Glaucoma 1, Open Angle, E (Adult-Onset); Huntingtin Interacting Protein L; Nemo-Related Protein; NEMO-Related Protein; TFIIIA-IntP; ALS12
Immunogen	Recombinant protein of human Optineurin

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

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: 27534431). Links myosin VI to the Golgi complex and plays an important role in Golgi ribbon formation (PubMed: 27534431). 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: 27538435). 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 huntingtin (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:[22854040](#)). 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)

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