

[KD Validated] Anti-OPTN Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

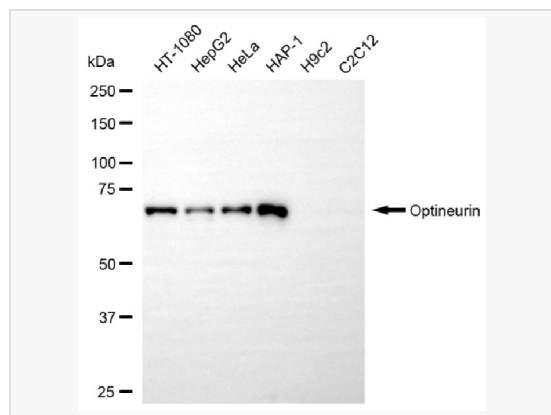
Catalog # R020378

Product Information

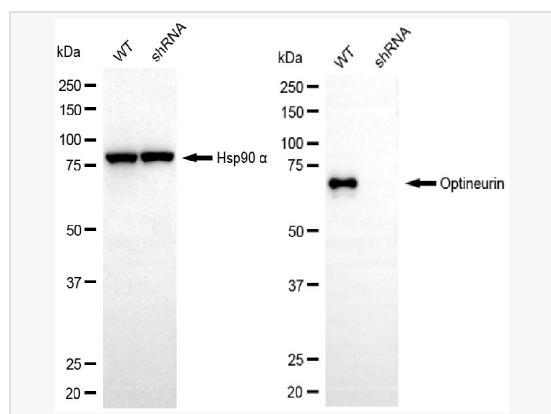
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	83S59L41
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human Optineurin
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-OPTN Rabbit mAb [83S59L41] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

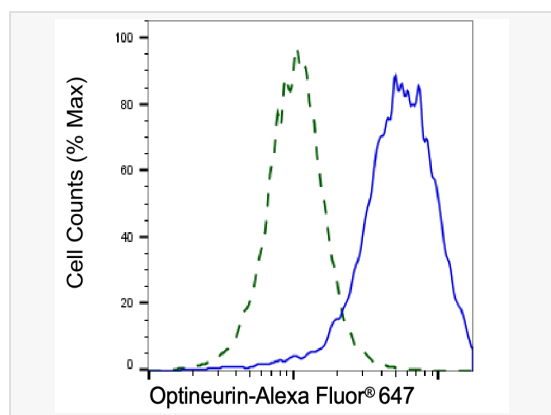
Synonyms	OPTN; Optineurin; FIP-2; FIP2; HYPL; HIP7; NRP; TFIIIA-INTP; GLC1E; Transcription Factor IIIA-Interacting Protein; Optic Neuropathy-Inducing Protein; Huntingtin-Interacting Protein 7; Huntingtin-Interacting Protein L; E3-14.7K-Interacting Protein; Huntingtin Yeast Partner L; HIP-7; Tumor Necrosis 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.
Calculated MW	Calculated MW: 66 kDa; Observed MW: 70 kDa
Uniprot ID	Q96CV9
Gene ID	10133
Background	This gene encodes the coiled-coil containing protein optineurin. Optineurin may play a role in normal-tension glaucoma and adult-onset primary open angle glaucoma. Optineurin interacts with adenovirus E3-14.7K protein and may utilize tumor necrosis factor-alpha or Fas-ligand pathways to mediate apoptosis, inflammation or vasoconstriction. Optineurin may also function in cellular morphogenesis and membrane trafficking, vesicle trafficking, and transcription activation through its interactions with the RAB8, huntingtin, and transcription factor IIIA proteins. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq, Jul 2008]
Cellular Location	Cytoplasm > perinuclear region. Golgi apparatus. Golgi apparatus > trans-Golgi network. Found in the perinuclear region and associates with the Golgi apparatus. Colocalizes with MYO6 and RAB8 at the Golgi complex and in vesicular structures close to the plasma membrane.



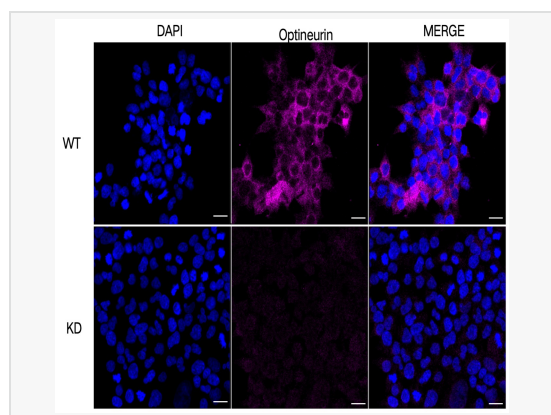
Western blotting analysis using optineurin antibody (R020378). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with optineurin antibody (R020378, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using optineurin antibody (R020378). Optineurin expression in wild-type (WT) and optineurin (OPTN) shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with optineurin antibody (R020378, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Validation of Optineurin knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Optineurin antibody (R020378, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of HeLa cells using Optineurin antibody (R020378, 1:1,000). Top panel: wild-type (WT); Bottom panel: Optineurin shRNA knockdown (KD). Nuclei were stained blue with DAPI; Acyl-CoA dehydrogenase short chain was stained magenta with Alexa Fluor[®] 647. Scale bar, 20 μ m.