

Optineurin (N-18): sc-48903

BACKGROUND

Optineurin, also designated FIP2, E3-14.7K-interacting protein, HYPL, transcription factor IIIA-interacting protein (TFIIIA-INTP), Huntingtin interacting protein L and NEMO-related protein, influences cell morphogenesis, membrane trafficking, vesicle trafficking and transcription activation through its interactions with the Rab8, Huntingtin and transcription factor IIIA proteins. Optineurin interacts with Adenovirus E3-14.7K protein and may utilize TNF α or FAS-ligand pathways to mediate apoptosis, inflammation or vasoconstriction. Optineurin mutations may impart normal-tension glaucoma and adult-onset primary open angle glaucoma. Optineurin is a 617 amino acid protein that contains leucine zippers and leucine-rich regions, and contains a potential Cys2-His-Cys zinc finger at residues 553-582. It localizes to the Golgi apparatus. RT-PCR studies indicate expression in human trabecular meshwork, nonpigmented ciliary epithelium, retina, brain, adrenal cortex, liver, fetus, lymphocyte and fibroblast. Northern blot studies indicate a 2.0 kb transcript in human trabecular meshwork and nonpigmented ciliary epithelium and a minor 3.6 kb transcript.

CHROMOSOMAL LOCATION

Genetic locus: OPTN (human) mapping to 10p13; Optn (mouse) mapping to 2 A1.

SOURCE

Optineurin (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Optineurin of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48903 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Optineurin (N-18) is recommended for detection of Optineurin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Optineurin (N-18) is also recommended for detection of Optineurin in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for Optineurin siRNA (h): sc-39054, Optineurin siRNA (m): sc-39055, Optineurin siRNA (r): sc-60013, Optineurin shRNA Plasmid (h): sc-39054-SH, Optineurin shRNA Plasmid (m): sc-39055-SH, Optineurin shRNA Plasmid (r): sc-60013-SH, Optineurin shRNA (h) Lentiviral Particles: sc-39054-V, Optineurin shRNA (m) Lentiviral Particles: sc-39055-V and Optineurin shRNA (r) Lentiviral Particles: sc-60013-V.

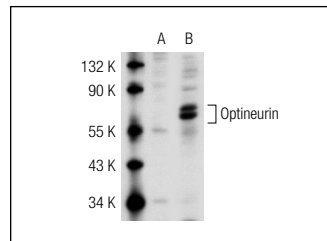
Molecular Weight of Optineurin: 74 kDa.

Positive Controls: Optineurin (h): 293T Lysate: sc-114995, HeLa whole cell lysate: sc-2200 or HeLa nuclear extract: sc-2120.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Optineurin (N-18): sc-48903. Western blot analysis of Optineurin expression in non-transfected: sc-117752 (A) and human Optineurin transfected: sc-114995 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Optineurin (C-2): sc-166576** or **Optineurin (C-1): sc-271549**, our highly recommended monoclonal alternatives to Optineurin (N-18).