

# Optineurin (H-220): sc-99214

## 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 $\alpha$  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 (H-220) is a rabbit polyclonal antibody raised against amino acids 321-540 mapping near the C-terminus of Optineurin of human origin.

## PRODUCT

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

## STORAGE

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

## APPLICATIONS

Optineurin (H-220) 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  $\mu$ g per 100-500  $\mu$ 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 (H-220) is also recommended for detection of Optineurin in additional species, including equine, canine, bovine and porcine.

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

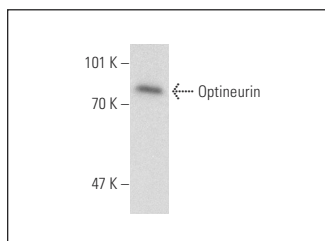
Molecular Weight of Optineurin: 74 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or Jurkat whole cell lysate: sc-2204.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Optineurin (H-220): sc-99214. Western blot analysis of Optineurin expression in Jurkat whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Satisfaction  
Guaranteed

Try **Optineurin (C-2): sc-166576** or **Optineurin (C-1): sc-271549**, our highly recommended monoclonal alternatives to Optineurin (H-220).