

Optineurin (h2): 293T Lysate: sc-170133

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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: OPTN (human) mapping to 10p13.

RESEARCH USE

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

PRODUCT

Optineurin (h2): 293T Lysate represents a lysate of human Optineurin transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Optineurin (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Optineurin antibodies.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

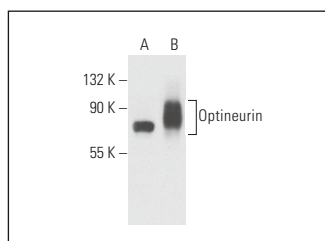
Optineurin (C-2): sc-166576 is recommended as a positive control antibody for Western Blot analysis of enhanced human Optineurin expression in Optineurin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Optineurin (C-2): sc-166576. Western blot analysis of Optineurin expression in non-transfected: sc-117752 (A) and human Optineurin transfected: sc-170133 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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