

NIF3L1 (B-8): sc-393632

BACKGROUND

The NGG1 interacting factor 3-like 1 (NIF3L1) is a 377 amino acid protein expressed mainly in the cytoplasm of cells in several different tissues. It has been highly conserved throughout evolution, from bacteria to mammals. NIF3L1 participates in retinoic acid-primed neural differentiation of P19 embryonic carcinoma cells by cooperating with Trip15/CSN2, a transcriptional corepressor/component of COP9 signalosome. NIF3L1 interacts with itself and with the NIF3L1 binding protein 1 (NIF3L1 BP1), which is a novel protein presumed to contain a leucine zipper domain.

REFERENCES

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- Hadano, S., et al. 2001. Cloning and characterization of three novel genes, ALS2CR1, ALS2CR2, and ALS2CR3, in the juvenile amyotrophic lateral sclerosis (ALS2) critical region at chromosome 2q33-q34: candidate genes for ALS2. *Genomics* 71: 200-213.
- Tascou, S., et al. 2001. Isolation and characterization of a novel human gene, NIF3L1, and its mouse ortholog, NIF3L1, highly conserved from bacteria to mammals. *Cytogenet. Cell Genet.* 90: 330-336.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605778. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Akiyama, H., et al. 2003. The role of transcriptional corepressor NIF3L1 in early stage of neural differentiation via cooperation with Trip15/CSN2. *J. Biol. Chem.* 278: 10752-10762.

CHROMOSOMAL LOCATION

Genetic locus: NIF3L1 (human) mapping to 2q33.1; Nif3l1 (mouse) mapping to 1 C1.3.

SOURCE

NIF3L1 (B-8) is a mouse monoclonal antibody raised against amino acids 23-146 mapping near the N-terminus of NIF3L1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

NIF3L1 (B-8) is available conjugated to agarose (sc-393632 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393632 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393632 PE), fluorescein (sc-393632 FITC), Alexa Fluor® 488 (sc-393632 AF488), Alexa Fluor® 546 (sc-393632 AF546), Alexa Fluor® 594 (sc-393632 AF594) or Alexa Fluor® 647 (sc-393632 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393632 AF680) or Alexa Fluor® 790 (sc-393632 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

NIF3L1 (B-8) is recommended for detection of NIF3L1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for NIF3L1 siRNA (h): sc-61193, NIF3L1 siRNA (m): sc-61194, NIF3L1 shRNA Plasmid (h): sc-61193-SH, NIF3L1 shRNA Plasmid (m): sc-61194-SH, NIF3L1 shRNA (h) Lentiviral Particles: sc-61193-V and NIF3L1 shRNA (m) Lentiviral Particles: sc-61194-V.

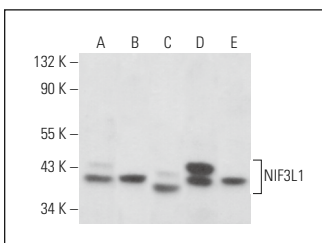
Molecular Weight of NIF3L1: 42 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181, Hep G2 cell lysate: sc-2227 or human heart extract: sc-363763.

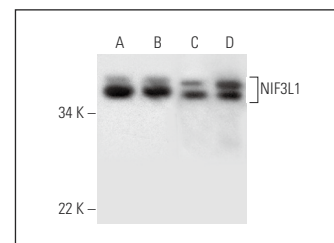
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



NIF3L1 (B-8): sc-393632. Western blot analysis of NIF3L1 expression in Hep G2 (A), Neuro-2A (B) and C32 (C) whole cell lysates and human fetal brain (D) and rat brain (E) tissue extracts.



NIF3L1 (B-8): sc-393632. Western blot analysis of NIF3L1 expression in NTERA-2 cl.D1 (A), Hep G2 (B) and LNCaP (C) whole cell lysates and human heart tissue extract (D).

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 for detailed protocols and support products.