

Neurofibromin (N): sc-68

BACKGROUND

Neurofibromatosis type 1 (NF1), or von Recklinghausen neurofibromatosis, is one of the most common autosomal dominant disorders in humans. Early linkage analysis mapped the NF1 gene to chromosome 17. The predicted NF1 transcript encodes the 2,818 amino acid protein Neurofibromin, also designated NF1-GAP-related protein (NF1GRP). By sequence analysis, similarity has been demonstrated within a small region of Neurofibromin and members of the Ras GAP gene family. Functionally, Neurofibromin has been shown by biochemical analysis involving RAS-GAP hydrolysis and functional complementation in yeast to further resemble GAP protein. The Neurofibromin protein is expressed at relatively constant levels in a broad range of cell lines and tissues including brain, lung, liver, kidney, spleen, muscle and colon. Although little is known regarding the function of Neurofibromin, the homology with the catalytic domain of proteins with GTPase activity suggests that Neurofibromin may also interact *in vivo* with Ras proteins.

CHROMOSOMAL LOCATION

Genetic locus: NF1 (human) mapping to 17q11.2.

SOURCE

Neurofibromin (N) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within the N-terminus of Neurofibromin of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-68 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Neurofibromin (N) is recommended for detection of Neurofibromin of human origin by Western Blotting (starting dilution 1:200, 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).

Neurofibromin (N) is also recommended for detection of Neurofibromin in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Neurofibromin siRNA (h): sc-36036, Neurofibromin shRNA Plasmid (h): sc-36036-SH and Neurofibromin shRNA (h) Lentiviral Particles: sc-36036-V.

Molecular Weight of Neurofibromin: 250 kDa.

Positive Controls: H4 cell lysate: sc-2408, A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

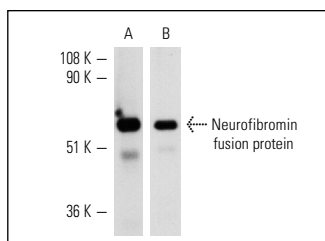
STORAGE

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

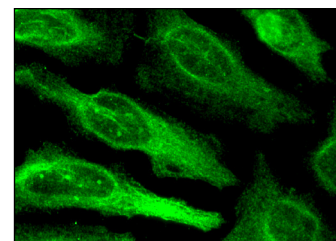
RESEARCH USE

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

DATA



Neurofibromin (H-300): sc-20683. Western blot analysis of human recombinant Neurofibromin fusion protein (A,B). Antibodies tested include: Neurofibromin (H-300): sc-20683 (A) and Neurofibromin (N): sc-68 (B).



Neurofibromin (N): sc-68. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

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Try **Neurofibromin (H-12): sc-376886** or **Neurofibromin (McNF27a): sc-20017**, our highly recommended monoclonal alternatives to Neurofibromin (N). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Neurofibromin (H-12): sc-376886**.