NF2 (B-12): sc-55575

BACKGROUND

Neurofibromatosis type 2 (NF2) is a dominantly inherited disorder characterized by the occurrence of bilateral vestibular schwannomas and other central nervous system tumors, including multiple meningiomas. NF2 occurs in about 1 of 40,000 live births. The NF2 gene is highly penetrant; NF2-affected individuals have a 95% chance of developing bilateral vestibular schwannomas. NF2 is distinct from NF1, which is characterized by an incidence of 1 in 4,000, maps to chromosome 17 and encodes a protein designated neurofibromin, which is a large protein with a GAP domain. Genetic linkage studies of both sporadic and familial tumors suggest that NF2 is caused by inactivation of a tumor suppressor gene that maps on chromosome 22q12.2 and encodes a 595 amino acid protein whose function appears to be mediated by interaction with the cytoskeleton.

CHROMOSOMAL LOCATION

Genetic locus: NF2 (human) mapping to 22q12.2; NF2 (mouse) mapping to 11 A1.

SOURCE

NF2 (B-12) is a mouse monoclonal antibody raised against amino acids 336-595 mapping at the C-terminus of NF2 of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

NF2 (B-12) is available conjugated to agarose (sc-55575 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-55575 HRP), 200 µg/ml, for WB, HIC(P) and ELISA; to either phycocerythrin (sc-55575 PE), fluorescein (sc-55575 FITC), Alexa Fluor® 488 (sc-55575 AF488), Alexa Fluor® 546 (sc-55575 AF546), Alexa Fluor® 594 (sc-55575 AF594) or Alexa Fluor® 647 (sc-55575 AF647), 200 µg/ml, for WB (RGB), IF, HIC(P) and FCM; and to either Alexa Fluor® 680 (sc-55575 AF680) or Alexa Fluor® 790 (sc-55575 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

NF2 (B-12) is recommended for detection of NF2 isoforms 1-10 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), immunohistochemistry (including paraffin-embedded sections) (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 NF2 siRNA (h): sc-36052, NF2 siRNA (m): sc-36053, NF2 shRNA Plasmid (h): sc-36052-SH, NF2 shRNA Plasmid (m): sc-36053-SH, NF2 shRNA (h) Lentiviral Particles: sc-36052-V and NF2 shRNA (m) Lentiviral Particles: sc-36053-V.

Molecular Weight of NF2: 70 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, PC-3 cell lysate: sc-2220 or MOLT-4 cell lysate: sc-2233.

STORAGE

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

DATA

NF2 (B-12): sc-55575. Western blot analysis of NF2 expression in PC-3 (A), MOLT-4 (B), C6 (C), NIH/3T3 (D) and MCF7 (E) whole cell lysates.

NF2 (B-12): sc-55575. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane staining (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS


RESEARCH USE

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

PROTOCOLS

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