**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, IHC(P) and ELISA; to either phycoerythrin (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, IHC(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 1:50-1:1500) 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**

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

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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