

LNX2 (B-3): sc-398156

BACKGROUND

LNX2 (LIGAND OF NUMB PROTEIN X2, PDZ DOMAIN-CONTAINING RING FINGER PROTEIN 1, PDZRN1), which interacts with mammalian Numb and NumbL, contains a RING finger domain, followed by a motif similar to a PTB-binding motif and four PDZ domains. LNX2 and Lnx1 (a proposed relative) are multimodular proteins that bind Numb, a cell fate determinant, through their NPXY motifs. Studies may suggest that Lnx proteins act as molecular scaffolds that promote the aggregation of unrelated, interacting proteins, such as Numb, to definitive subcellular sites. The LNX2 gene maps to chromosome 13q12.2 based on an alignment of the LNX2 sequence with the genomic sequence. Lnx proteins may form large networks by homomeric binding, and their expression patterns overlap with those of the Numb proteins. Furthermore, studies also suggest that the oligomerization of LNX2 and Numb binding occurs simultaneously.

REFERENCES

- Evans, W.J., et al. 2000. Synthesis of arene-soluble mixed-metal Zr/Ce, Zr/Y, and related $[[Zr_2(O^iPr)_2]LnX_2]_n$ complexes using the dizirconium non-aisopropoxide ligand. *Inorg. Chem.* 39: 2125-2129.
- Xie, Y., et al. 2001. Identification of a human LNX protein containing multiple PDZ domains. *Biochem. Genet.* 39: 117-126.
- Rice, D.S., et al. 2001. The Lnx family proteins function as molecular scaffolds for Numb family proteins. *Mol. Cell. Neurosci.* 18: 525-540.
- Nie, J., et al. 2002. LNX functions as a RING type E3 ubiquitin ligase that targets the cell fate determinant NUMB for ubiquitin-dependent degradation. *EMBO J.* 21: 93-102.

CHROMOSOMAL LOCATION

Genetic locus: LNX2 (human) mapping to 13q12.2; Lnx2 (mouse) mapping to 5 G3.

SOURCE

LNX2 (B-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 25-52 near the N-terminus of LNX2 of human origin.

PRODUCT

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

LNX2 (B-3) is available conjugated to agarose (sc-398156 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398156 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398156 PE), fluorescein (sc-398156 FITC), Alexa Fluor® 488 (sc-398156 AF488), Alexa Fluor® 546 (sc-398156 AF546), Alexa Fluor® 594 (sc-398156 AF594) or Alexa Fluor® 647 (sc-398156 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398156 AF680) or Alexa Fluor® 790 (sc-398156 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398156 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

LNX2 (B-3) is recommended for detection of LNX2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

LNX2 (B-3) is also recommended for detection of LNX2 in additional species, including canine and avian.

Suitable for use as control antibody for LNX2 siRNA (h): sc-60958, LNX2 siRNA (m): sc-60959, LNX2 shRNA Plasmid (h): sc-60958-SH, LNX2 shRNA Plasmid (m): sc-60959-SH, LNX2 shRNA (h) Lentiviral Particles: sc-60958-V and LNX2 shRNA (m) Lentiviral Particles: sc-60959-V.

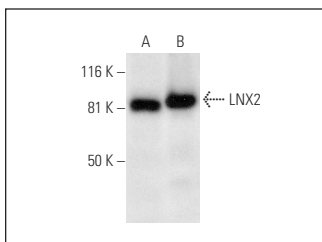
Molecular Weight of LNX2: 76 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, COLO 205 whole cell lysate: sc-364177 or HeLa nuclear extract: sc-2120.

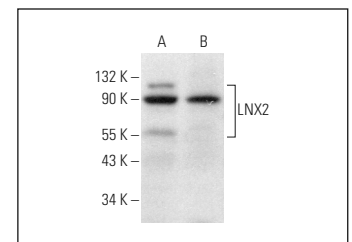
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



LNX2 (B-3): sc-398156. Western blot analysis of LNX2 expression in Hep G2 whole cell lysate (A) and HeLa nuclear extract (B).



LNX2 (B-3): sc-398156. Western blot analysis of LNX2 expression in COLO 205 (A) and SW480 (B) whole cell lysates.

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.

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