

NumbL (C-4): sc-390590

BACKGROUND

In *Drosophila*, neuronal cell fate decisions are directed by NUMB, a signaling adapter protein with two protein-protein interaction domains, namely a phosphotyrosine-binding domain and a proline-rich SH3-binding region (PRR). The mammalian NUMB homolog plays a role in the determination of cell fate during development and binds with a variety of proteins, including Eps15, LNX1 and Notch 1. NumbL (NUMB-like protein), also known as Numb-R, NBL, CAG3A, CTG3a, NUMBLIKE or TNRC23, is a 609 amino acid cytoplasmic protein that, like NUMB, is thought to play a role in cell fate. Expressed at high levels in developing brain tissue, NumbL contains one PID (phosphotyrosine interaction domain) and plays an important role in neuronal differentiation, possibly associating with Eps15 and Notch 1. In mice, deletion of the NumbL gene is associated with early embryonic death, suggesting an essential role for NumbL in early development.

CHROMOSOMAL LOCATION

Genetic locus: NUMBL (human) mapping to 19q13.2; NumbL (mouse) mapping to 7 A3.

SOURCE

NumbL (C-4) is a mouse monoclonal antibody raised against amino acids 331-410 mapping within an internal region of NumbL 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.

NumbL (C-4) is available conjugated to agarose (sc-390590 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390590 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390590 PE), fluorescein (sc-390590 FITC), Alexa Fluor® 488 (sc-390590 AF488), Alexa Fluor® 546 (sc-390590 AF546), Alexa Fluor® 594 (sc-390590 AF594) or Alexa Fluor® 647 (sc-390590 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390590 AF680) or Alexa Fluor® 790 (sc-390590 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

NumbL (C-4) is recommended for detection of NumbL 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 NumbL siRNA (h): sc-62707, NumbL siRNA (m): sc-62708, NumbL shRNA Plasmid (h): sc-62707-SH, NumbL shRNA Plasmid (m): sc-62708-SH, NumbL shRNA (h) Lentiviral Particles: sc-62707-V and NumbL shRNA (m) Lentiviral Particles: sc-62708-V.

Molecular Weight (predicted) of NumbL isoforms: 65/66/71/72 kDa.

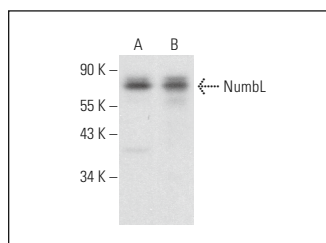
Molecular Weight (observed) of NumbL: 78 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, IMR-32 cell lysate: sc-2409 or 3T3-L1 cell lysate: sc-2243.

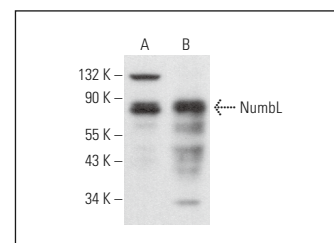
RECOMMENDED SUPPORT REAGENTS

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



NumbL (C-4): sc-390590. Western blot analysis of NumbL expression in 3T3-L1 (A) and Neuro-2A (B) whole cell lysates.



NumbL (C-4): sc-390590. Western blot analysis of NumbL expression in IMR-32 whole cell lysate (A) and rat hippocampus tissue extract (B).

SELECT PRODUCT CITATIONS

- Bubak, M.P., et al. 2022. Notch, Numb and Numb-like responses to exercise-induced muscle damage in human skeletal muscle. *Exp. Physiol.* 107: 800-806.
- Zhang, S., et al. 2024. Numb and NumbL inhibit melanoma tumor growth by influencing the immune microenvironment. *BMC Cancer* 24: 1419.

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.

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