# NumbL (H-80): sc-135071



The Power to Question

#### **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 (H-80) is a rabbit polyclonal antibody raised against amino acids 331-410 mapping within an internal region of NumbL of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **STORAGE**

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

# **APPLICATIONS**

NumbL (H-80) is recommended for detection of NumbL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

NumbL (H-80) is also recommended for detection of NumbL in additional species, including equine, canine and bovine.

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.

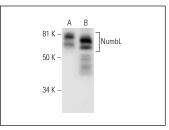
Molecular Weight (observed) of NumbL: 78 kDa.

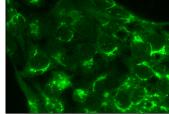
Positive Controls: Y79 cell lysate: sc-2240, human brain hippocampus extract: sc-364375 or Hep G2 cell lysate: sc-2227.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **DATA**





NumbL (H-80): sc-135071. Western blot analysis of NumbL expression in Y79 whole cell lysate (**A**) and human hippocampus tissue extract (**B**).

NumbL (H-80): sc-135071. Immunofluorescence staining of formalin-fixed Hep G2 cells showing Golgi apparatus and cytoplasmic localization.

#### **RESEARCH USE**

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

# **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **NumbL (C-4):** sc-390590 or **NumbL (H-5):** sc-390799, our highly recommended monoclonal alternatives to NumbL (H-80).

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