

NUMB (H-70): sc-25668

BACKGROUND

Neuronal cell fate decisions are directed in *Drosophila* by NUMB, a signaling adapter protein with two protein-protein interaction domains: a phosphotyrosine-binding domain and a proline-rich SH3-binding region (PRR). Mammalian NUMB homologs play a role in the determination of cell fates during development and bind with Eps15, LNX1 and Notch 1. Conditional mouse mutants with deletion of NUMB in developing sensory ganglia show a reduction in axonal arborization in afferent fibers. Changes in cellular calcium homeostasis influences NUMB-dependent cell fate decisions during development of the nervous system. Chicken NUMB (c-NUMB) protein is localized to the basal cortex of mitotic neuroepithelial cells.

CHROMOSOMAL LOCATION

Genetic locus: NUMB (human) mapping to 14q24.2; Numb (mouse) mapping to 12 D1.

SOURCE

NUMB (H-70) is a rabbit polyclonal antibody raised against amino acids 541-610 of NUMB of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as agarose conjugate for immunoprecipitation, sc-25668 AC, 500 µg/0.25 ml agarose in 1 ml.

STORAGE

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

APPLICATIONS

NUMB (H-70) is recommended for detection of NUMB of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

NUMB (H-70) is also recommended for detection of NUMB in additional species, including equine, canine and porcine.

Suitable for use as control antibody for NUMB siRNA (h): sc-42146, NUMB siRNA (m): sc-42147, NUMB shRNA Plasmid (h): sc-42146-SH, NUMB shRNA Plasmid (m): sc-42147-SH, NUMB shRNA (h) Lentiviral Particles: sc-42146-V and NUMB shRNA (m) Lentiviral Particles: sc-42147-V.

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

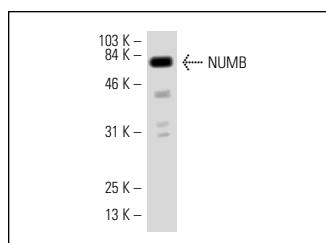
Molecular Weight (observed) of NUMB: 78 kDa.

Positive Controls: A549 cell lysate: sc-2413, T98G cell lysate: sc-2294 or human ovary extract: sc-363769.

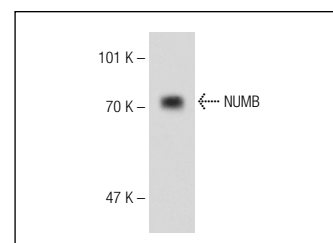
RECOMMENDED SECONDARY REAGENTS

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



NUMB (H-70): sc-25668. Western blot analysis of NUMB expression in T98G whole cell lysate.



NUMB (H-70): sc-25668. Western blot analysis of NUMB expression in A549 whole cell lysate.

SELECT PRODUCT CITATIONS

- Yan, B., et al. 2008. Characterization of NUMB expression in astrocytomas. *Neuropathology* 28: 479-484.
- Dai, S., et al. 2010. Chronic AMD3100 antagonism of SDF-1 α -CXCR4 exacerbates cardiac dysfunction and remodeling after myocardial infarction. *J. Mol. Cell. Cardiol.* 49: 587-597.
- Feldman, D.E., et al. 2013. The TBC1D15 oncoprotein controls stem cell self-renewal through destabilization of the Numb-p53 complex. *PLoS ONE* 8: e57312.

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 **NUMB (48): sc-136554**, our highly recommended monoclonal alternative to NUMB (H-70).