**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.


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-2005 (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**

**SELECT PRODUCT CITATIONS**


**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.

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