10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NUMB Antibody
Catalog # ASC11326

Specification

NUMB Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	P49757
Other Accession	NP_1005743, 54144625
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**NUMB antibody can be used for detection of NUMB by Western blot at 0.25 - 0.5 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.**

NUMB Antibody - Additional Information

Gene ID **8650**

Target/Specificity
NUMB; At least four isoforms of NUMB are known to exist; this antibody will detect all of them.

Reconstitution & Storage
NUMB antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
NUMB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NUMB Antibody - Protein Information

Name NUMB (HGNC:8060)

Function
Regulates clathrin-mediated receptor endocytosis (PubMed:18657069). Plays a role in the process of neurogenesis (By similarity). Required throughout embryonic neurogenesis to maintain neural progenitor cells, also called radial glial cells (RGCs), by allowing their daughter cells to choose progenitor over neuronal cell fate (By similarity). Not required for the proliferation of neural progenitor cells before the onset of neurogenesis. Also involved postnatally in the subventricular zone (SVZ) neurogenesis by regulating SVZ neuroblasts survival and ependymal wall integrity (By similarity). May also mediate local repair of brain ventricular wall damage (By similarity).

Cellular Location

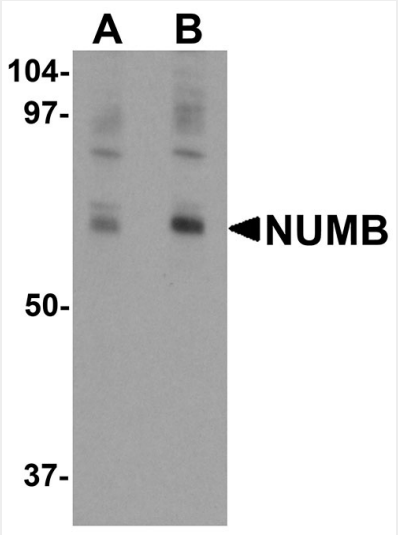
Cell membrane; Peripheral membrane protein; Cytoplasmic side. Endosome membrane; Peripheral membrane protein; Cytoplasmic side. Note=Localizes to perinuclear endosomes in an AAK1-dependent manner.

NUMB Antibody - Protocols

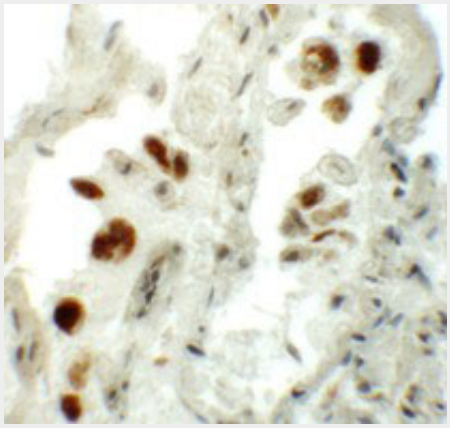
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NUMB Antibody - Images

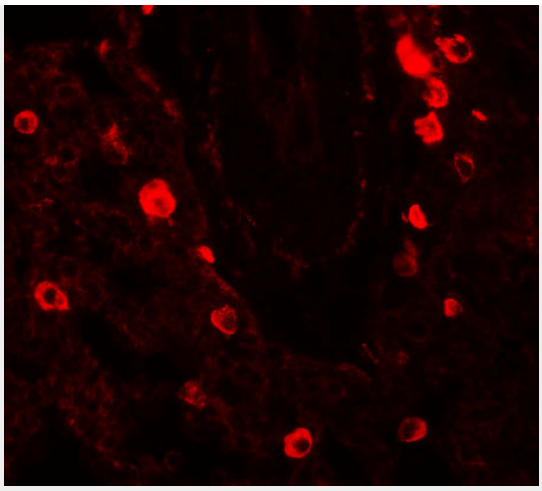


Western blot analysis of NUMB in mouse lung tissue lysate with NUMB antibody at (A) 0.25 and (B) 0.5 µg/mL.



Immunohistochemistry of NUMB in human lung tissue with NUMB antibody at 5 µg/mL.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Immunofluorescence of NUMB in human lung tissue with NUMB antibody at 20 µg/mL.

NUMB Antibody - Background

NUMB Antibody: NUMB, the mammalian homolog to the Drosophila asymmetric cell fate determinant NUMB, is thought to share several features molecular mechanisms in mammalian cells, generating asymmetric cell divisions during neurogenesis in vertebrate development as well as in hematopoietic stem cells. NUMB has been shown to inhibit Notch signaling, and is itself regulated by ubiquitinylation by MDM2. NUMB has also been shown to help activate the tumor suppressor p53, suggesting that loss of NUMB in cancerous cells would not only activate the potential oncogene Notch, but diminish the tumor suppressing effect of p53.

NUMB Antibody - References

Zhong W, Feder JN, Jiang MM, et al. Asymmetric localization of a mammalian numb homolog during mouse cortical neurogenesis. Neuron 1996; 17:43-53.
Wu M, Kwon HY, Rattis F, et al. Imaging hematopoietic precursor division in real time. Cell. Stem Cell 2007; 1:541-54.
Conboy IM and Rando TA. The regulation of Notch signaling controls satellite cell activation, cell fate determination in postnatal myogenesis. Dev. Cell 2002; 3:397-409
Yogosawa S, Miyauchi Y, Honda R, et al. Mammalian Numb is a target protein of Mdm2, ubiquitin ligase. Biochem. Biophys. Res. Commun. 2003; 302:869-72.