

Goat Anti-NUMB Antibody

Peptide-affinity purified goat antibody Catalog # AF1748a

#### Specification

## **Goat Anti-NUMB Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW

IHC, IF, FC, Pep-ELISA <u>P49757</u> <u>NP\_001005745, 8650, 18222 (mouse)</u> Human, Mouse Dog Goat Polyclonal 100ug/200ul IgG 70804

### **Goat Anti-NUMB Antibody - Additional Information**

Gene ID 8650

Other Names Protein numb homolog, h-Numb, Protein S171, NUMB

**Dilution** IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50 Pep-ELISA~~N/A

**Format** 0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-NUMB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Goat Anti-NUMB Antibody - Protein Information**

Name NUMB (<u>HGNC:8060</u>)

Function



# Regulates clathrin-mediated receptor endocytosis (PubMed: <a

href="http://www.uniprot.org/citations/18657069" target="\_blank">18657069</a>). 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.

#### **Goat Anti-NUMB Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Goat Anti-NUMB Antibody - Images



AF1748a staining (0.03  $\mu$ g/ml) of Mouse Brain lysate (RIPA buffer, 30  $\mu$ g total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.





EB05296 Immunofluorescence analysis of paraformaldehyde fixed A431 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cell junction and cytoplasmic staining. The nuclea



EB05296 Immunofluorescence analysis of paraformaldehyde fixed NIH3T3 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing plasma membrane and cytoplasmic staining. The n





EB05296 Flow cytometric analysis of paraformaldehyde fixed A431 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol



EB05296 Immunofluorescence analysis of paraformaldehyde fixed A431 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cell junction and cytoplasmic staining. The nuclea



EB05296 Immunofluorescence analysis of paraformaldehyde fixed NIH3T3 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing plasma membrane and cytoplasmic staining. The n





EB05296 Flow cytometric analysis of paraformaldehyde fixed A431 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol



EB05296 (8µg/ml) staining of paraffin embedded Human Prostate. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



EB05296 Negative Control showing staining of paraffin embedded Human Prostate, with no primary antibody.

## Goat Anti-NUMB Antibody - Background

The protein encoded by this gene plays a role in the determination of cell fates during development. The encoded protein, whose degradation is induced in a proteasome-dependent manner by MDM2, is a membrane-bound protein that has been shown to associate with EPS15, LNX1, and NOTCH1. Four transcript variants encoding different isoforms have been found for this



gene.

## Goat Anti-NUMB Antibody - References

Symmetric division and expression of its regulatory gene Numb in human cervical squamous carcinoma cells. Chen H, et al. Pathobiology, 2009 May. PMID 19468255.

Numb-mediated neurite outgrowth is isoform-dependent, and requires activation of voltage-dependent calcium channels. Lu CB, et al. Neuroscience, 2009 Jun 30. PMID 19344753. Numb3 is an endocytosis adaptor for the inflammatory marker P-selectin. Schl]ter T, et al. Biochem Biophys Res Commun, 2009 Feb 20. PMID 19138666.

AIP4/Itch regulates Notch receptor degradation in the absence of ligand. Chastagner P, et al. PLoS One, 2008 Jul 16. PMID 18628966.

Numb endocytic adapter proteins regulate the transport and processing of the amyloid precursor protein in an isoform-dependent manner: implications for Alzheimer disease pathogenesis. Kyriazis GA, et al. J Biol Chem, 2008 Sep 12. PMID 18599481.