

Anti-NUMB Picoband Antibody

Catalog # ABO11992

#### Specification

# Anti-NUMB Picoband Antibody - Product Information

ApplicationWBPrimary AccessionP49757HostRabbitReactivityHuman, MouseClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Protein numb Homolog(NUMB) detection. Tested with WB in Human; Mouse.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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

Gene ID 8650

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

Calculated MW 70804 MW KDa

**Application Details** Western blot, 0.1-0.5 µg/ml, Human, Mouse<br>

Subcellular Localization Membrane; Peripheral membrane protein.

Protein Name Protein numb homolog

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human NUMB(194-220aa SFRVTTATEQAEREEIMKQMQDAKKAE), different from the related mouse and rat sequences by one amino acid.

**Purification** Immunogen affinity purified.

**Cross Reactivity** 



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Contains 1 PID domain.

# Anti-NUMB Picoband Antibody - Protein Information

Name NUMB (HGNC:8060)

#### 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.

## **Anti-NUMB Picoband 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>

## Anti-NUMB Picoband Antibody - Images





Anti- NUMB Picoband antibody, ABO11992, Western blottingAll lanes: Anti NUMB (ABO11992) at 0.5ug/mlLane 1: U87 Whole Cell Lysate at 40ugLane 2: NEURO Whole Cell Lysate at 40ugPredicted bind size: 71KDObserved bind size: 71KD

# Anti-NUMB Picoband Antibody - Background

Protein numb homolog is a protein that in humans is encoded by the NUMB gene. It is mapped to 14q24.2 to q24.3. 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. The primary function of Numb in cell differentiation is as an inhibitor of Notch signaling which is essential for maintaining self-renewal potential in stem and progenitor cells. Numb also plays a crucial role in asymmetrical cell division during development, allowing for differential cell fate specification in the central and peripheral nervous systems. What's more, the numb gene protein product controls binary cell fate decisions in the peripheral and central nervous systems of both invertebrates and mammals during neurogenesis.