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Store at -20C
#2733

Numb Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 72, 74	Source/Isotype: Rabbit	UniProt ID: #P49757	Entrez-Gene Id: 8650
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Numb Antibody detects endogenous levels of total Numb protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Phe482 of human Numb. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Numb contains an amino-terminal phosphotyrosine binding (PTB) domain and carboxy-terminal endocytic binding motifs for α-adaptin and EH (Eps15 homology) domain-containing proteins, indicating a role in endocytosis (1,2). There are four mammalian Numb splicing isoforms that are differentially expressed and may have distinct functions (3-5). Numb acts as a negative regulator of Notch signaling by promoting ubiquitination and degradation of Notch (6). The protein is asymmetrically segregated into one daughter cell during cell division, producing two daughter cells with different responses to Notch signaling and different cell fates (7,8). The localization of Numb can also be regulated by G protein-coupled receptor (GPCR) and protein kinase C (PKC) signaling (9).

Background References

1. Berdnik, D. et al. (2002) *Dev. Cell* 3, 221-231.
2. Santolini, E. et al. (2000) *J. Cell Biol.* 151, 1345-1352.
3. Dho, S.E. et al. (1999) *J. Biol. Chem.* 274, 33097-33104.
4. Verdi, J.M. et al. (1999) *Proc. Natl. Acad. Sci. USA* 96, 10472-10476.
5. Toriya, M. et al. (2006) *Dev. Neurosci.* 28, 142-155.
6. McGill, M.A. and McGlade, C.J. (2003) *J. Biol. Chem.* 278, 23196-23203.
7. Verdi, J.M. et al. (1996) *Curr. Biol.* 6, 1134-1145.
8. Reugels, A.M. et al. (2006) *Dev. Dyn.* 235, 934-948.
9. Dho, S.E. et al. (2006) *Mol. Biol. Cell* 17, 4142-4155.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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