

# Numb Antibody

✓ 100 µl  
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

| Applications    | Species Cross-Reactivity* | Molecular Wt. | Source |
|-----------------|---------------------------|---------------|--------|
| W<br>Endogenous | H                         | 72, 74 kDa    | Rabbit |

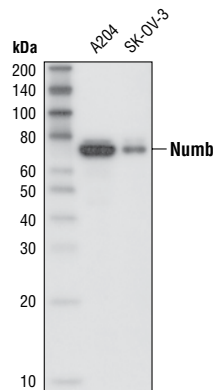
**Background:** Numb contains an amino-terminal phosphotyrosine-binding (PTB) domain and carboxy-terminal endocytic binding motifs for  $\alpha$ -adaptin and EH (Eps15 homology) domain-containing proteins, indicating a role in endocytosis (1,2). There are four mammalian Numb splicing isoforms and they 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; therefore two daughter cells have different responses to Notch signaling and have different cell fates (7,8). The localization of Numb can also be regulated by G-protein coupled receptor (GPCR) and PKC signaling (9).

**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 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.*, Epub Ahead of Print.



Western blot analysis of total cell lysates from A204 and SK-OV-3 cells, using Numb Antibody.

**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.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

#### Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

**IMPORTANT: For western blots, incubate membrane with diluted 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 IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine  
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.