

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Numb.
Source	Monoclonal Mouse IgG _{2B} Clone # 447716
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Numb Thr356-Leu592 Accession # AAH68476
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

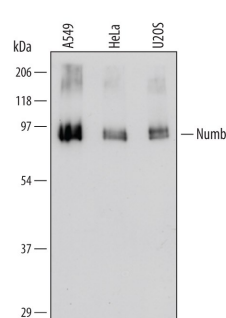
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	Immersion fixed RT-4 human urinary bladder transitional cell papilloma cell line

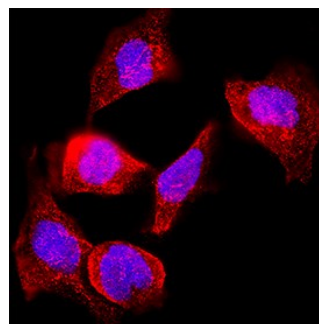
DATA

Western Blot



Detection of Human Numb by Western Blot. Western blot shows lysates of A549 human lung carcinoma cell line, HeLa human cervical epithelial carcinoma cell line, and U2OS human osteosarcoma cell line. PVDF membrane was probed with 0.1 µg/mL of Mouse Anti-Human Numb Monoclonal Antibody (Catalog # MAB4338) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Numb at approximately 90 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunocytochemistry



Numb in RT-4 Human Cell Line. Numb was detected in immersion fixed RT-4 human urinary bladder transitional cell papilloma cell line using Mouse Anti-Human Numb Monoclonal Antibody (Catalog # MAB4338) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. Staining was performed using our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Numb is a member of a family of cytoplasmic adaptor proteins termed CLASPS (Clathran-associated Sorting Proteins). These link transmembrane cargo proteins to the endocytic machinery. Numb, a conserved cell-fate determining factor, is normally associated with the basolateral surface of polarized cells. Movement towards the apical surface induces its phosphorylation, which precludes its entry into this region. Human Numb is 651 amino acids (aa) in length. It contains one PTB (aa 24-172) and one PRR (aa 366-413) domain. There is a potential for multiple alternate splice forms that involve all regions of the molecule. Over aa 356-592, human Numb shares 88% and 90% aa identity with mouse and canine Numb, respectively.