## SY SY Synaptic Systems

Numblike

Cat.No. 374-0P; control peptide, 100 µg peptide (lyophilized)

## **Data Sheet**

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Reconstitution/ Storage	100 $\mu$ g peptide, lyophilized. For reconstitution add 100 $\mu$ l H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 579 to 595 from mouse Numbl (UniProt Id: O08919)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	374 003
Remarks	This control peptide consists of the synthetic peptide (aa 579-595 of mouse Numblike) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of peptide needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

## TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Numb proteins (**Numblike** and Numb) display a complex pattern of functions such as the control of asymmetric cell division, cell fate choice, endocytosis, cell adhesion, and cell migration. They have been shown to inhibit Notch signaling by stimulating endocytosis of Notch.

Numb and Numblike have at least partially distinct functions. Numblike is a negative regulator of the NF-kB signaling pathway by abrogating TRAF5-induced activation of NF-kB. Recently, Numblike was implicated as a physiologically relevant target of microRNA miR-34a in neural progenitor cells allowing for enhanced Notch signaling and inhibition of neuronal differentiation.

Numb and Numblike are essential in maintaining neural progenitor cells during early neurogenesis by allowing cells to choose progenitor over neuronal fates. They were recently also discovered to be involved in cardiac morphogenesis.

## **Selected General References**

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