

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human NK1R in ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>3</sub> Clone # 694501
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	HEK293 human embryonic kidney cell line transfected with human NK1R Accession # P25103
<b>Formulation</b>	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.

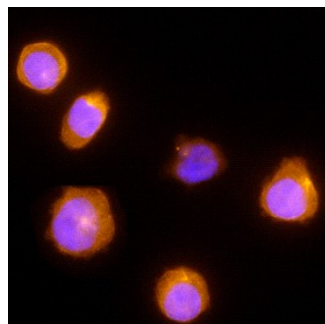
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

## DATA

### Immunocytochemistry



**NK1R in THP-1 Human Cell Line.** NK1R was detected in immersion fixed THP-1 human acute monocytic leukemia cell line using Mouse Anti-Human NK1R Monoclonal Antibody (Catalog # MAB66871) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (yellow; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to plasma membrane and cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

NK1R (Neurokinin-1 receptor), gene name TACR1 (tachykinin receptor-1), is an ~80 kDa 7-transmembrane glycoprotein receptor for the proinflammatory tachykinin neuropeptide, substance P. NK1R is constitutively or inducibly expressed on a wide variety of cells, including monocytes, macrophages, microglia, lymphocytes, neutrophils, mast cells, and neurons. The 407 amino acid (aa) human NK1R contains 89 extracellular aa over multiple segments which collectively share 92% aa identity with corresponding regions of mouse and rat NK1R. A ~50 kDa short isoform that ends at aa 311 lacks almost all of the C-terminal cytoplasmic signaling region. It is the only form expressed in human monocytes and undifferentiated THP-1 cells, and its function appears to differ from the long isoform.