

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Neuromedin B R/NMBR. Stains human Neuromedin B R/NMBR transfectants but not irrelevant transfectants.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 466505
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human NMBR Met1-Met390 Accession # AAB27330
<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.

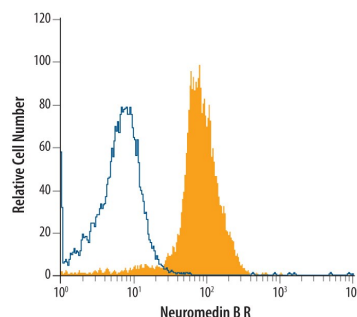
## APPLICATIONS

**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>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>Intracellular Staining by Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

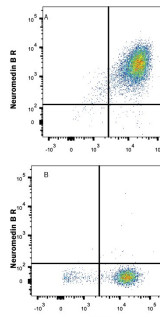
## DATA

### Intracellular Staining by Flow Cytometry



**Detection of Neuromedin B R/NMBR in HT-29 Human Cell Line by Flow Cytometry.** HT-29 human colon adenocarcinoma cell line was stained with Mouse Anti-Human Neuromedin B R/NMBR Monoclonal Antibody (Catalog # MAB4728, filled histogram) or isotype control antibody (Catalog # MAB003, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG F(ab')<sub>2</sub> Secondary Antibody (Catalog # F0101B). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

### Flow Cytometry



**Detection of Neuromedin B R/NMBR in HEK293 Human Cell Line Transfected with Human Neuromedin B R/NMBR and eGFP by Flow Cytometry.** HEK293 human embryonic kidney cell line transfected with either (A) Neuromedin B R/NMBR or (B) irrelevant protein and eGFP was stained with Mouse Anti-Human Neuromedin B R/NMBR Monoclonal Antibody (Catalog # MAB4728) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). Quadrant markers were set based on control antibody staining (Catalog # MAB003). View our protocol for [Staining Membrane-associated Proteins](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<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

Neuromedin B Receptor (NMBR) is an 80 kDa, 390 amino acid (aa) G-protein coupled 7-transmembrane glycoprotein receptor for bombesin-like peptides, binding Neuromedin B with high affinity and GRP (gastrin releasing peptide) with lower affinity. Neuromedin B R expression in the olfactory and central thalamic regions of the brain plays a role in thermoregulation. It has also been shown to be mitogenic in colonic epithelium. Expression in the pituitary gland is important for regulation of the pituitary-thyroid axis. Within extracellular domains, human Neuromedin B R shares 86% and 82% aa identity with mouse and rat Neuromedin B R, respectively.