

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Somatostatin R2/SSTR2. Stains SSTR2 transfectants but not irrelevant transfectants.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 402038
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with Somatostatin R2/SSTR2 Met1-Ile369 Accession # P30874
<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 as a 0.2 µm filtered solution in PBS.

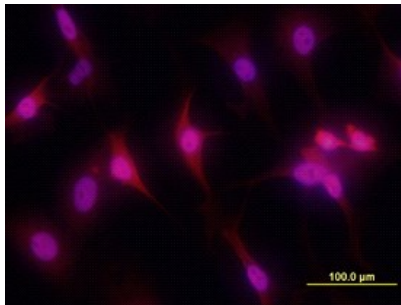
## APPLICATIONS

**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
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below
<b>Intracellular Staining by Flow Cytometry</b>	2.5 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.	

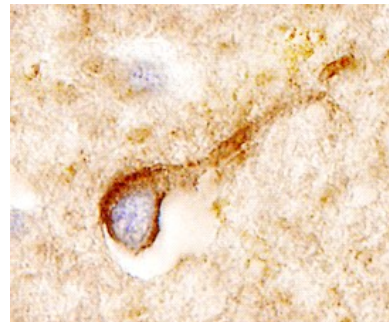
## DATA

### Immunocytochemistry



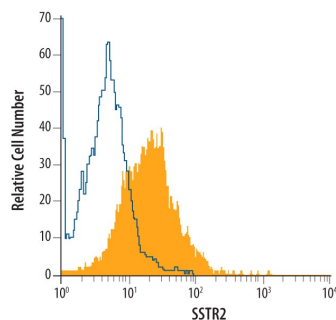
**Somatostatin R2/SSTR2 in MDA-MB-231 Human Cell Line.** Somatostatin R2/SSTR2 was detected in immersion fixed MDA-MB-231 human breast cancer cell line using 10 µg/mL Human Somatostatin R2/SSTR2 Monoclonal Antibody (Catalog # MAB4224) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (brown; Catalog # NL007) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

### Immunohistochemistry



**Somatostatin R2/SSTR2 in Human Brain.** Somatostatin R2/SSTR2 was detected in immersion fixed paraffin-embedded sections of human brain (cingulate cortex) using 3 µg/mL Human Somatostatin R2/SSTR2 Monoclonal Antibody (Catalog # MAB4224) overnight at 4 °C. Tissue was stained with the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

### Intracellular Staining by Flow Cytometry



**Detection of Somatostatin R2/SSTR2 in MDA-MB-231 Human Cell Line by Flow Cytometry.** MDA-MB-231 human breast cancer cell line was stained with Human Somatostatin R2/SSTR2 Monoclonal Antibody (Catalog # MAB4224, 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.

## 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>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

Somatostatin Receptor 2 (SSTR2) is one of five 7-transmembrane G-protein-coupled receptors for somatostatins 14 and 28. Human SSTR2 shares 84% aa identity with mouse SSTR2 within the extracellular domains. Isoform B (357 aa) has an alternate C-terminal cytoplasmic region that is 12 aa shorter than that of isoform A (369 aa, reported as 93 kDa). Both are expressed in brain, stomach, intestinal epithelia, pancreatic islets and kidney tubules. Isoform B is also expressed in parotid, thyroid and bronchial glands.