

DESCRIPTION

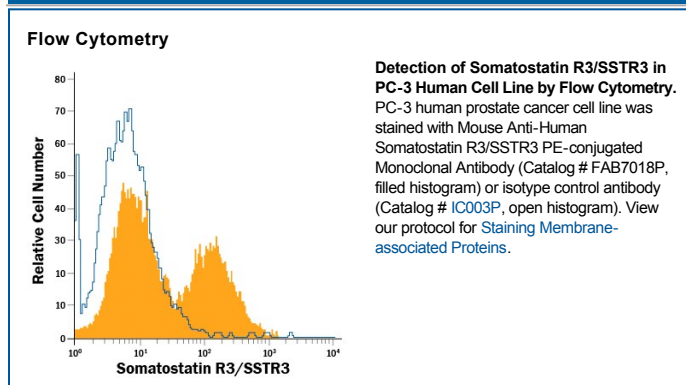
Species Reactivity	Human
Specificity	Detects human Somatostatin R3/SSTR3
Source	Monoclonal Mouse IgG _{2A} Clone # 576017
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human Somatostatin R3/SSTR3 Accession # P32745
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	10 μ L/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Somatostatin Receptor 3 (SSTR3) is one of five related receptors that belong to GPCR family 1. It is a 7-transmembrane glycoprotein whose MW in SDS-PAGE varies from 50-80 kDa (predicted MW is 45 kDa). All five somatostatin receptors couple to G_i-proteins and inhibit adenylyl cyclase. SSTR3 binds both the 14 amino acid (aa) and 28 aa forms of Somatostatin, and in contrast to rat SSTR3, appears to prefer the shorter, or 14 aa form of Somatostatin. SSTR3 mediates a number of effects, including promoting tight junction formation between epithelium, blocking the release of growth hormone in the anterior pituitary, increasing food intake, and blocking cell proliferation. SSTR3 exists as either a homodimer, or as a heterodimer complexed to SSTR2a and MCHR1. Cells known to express SSTR3, either in the cell membrane or internally include gastric ghrelin cells, the cilium associated with multiple CNS neurons and pancreatic β -cells, somatotrophic acidophils of the anterior pituitary, renal proximal tubule cells, hepatic stellate (or Ito) cells, keratinocytes, mucosal mast cells, multiple tumor cell types, and the longitudinal visceral smooth muscle of the small intestine. In its extracellular domains, human SSTR3 shares 81% aa sequence identity with rat SSTR3, and 28%, 31%, 35% and 36% aa sequence identity with the extracellular domains of human SSTR1, 2, 4 and 5, respectively.