

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human Somatostatin in direct ELISA.
Source	Monoclonal Rat IgG ₁ Clone # 906552
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	KLH-coupled human Somatostatin peptide Accession # P61278
Formulation	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.

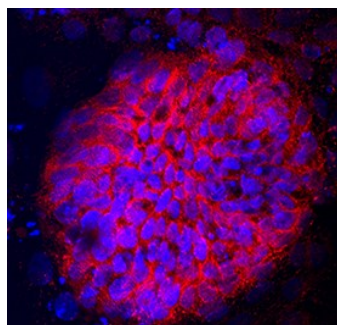
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	See Below

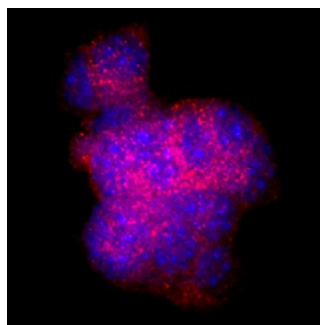
DATA

Immunocytochemistry



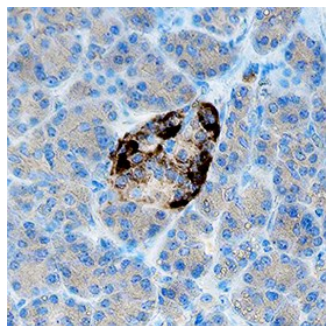
Somatostatin in Human Embryonic Stem Cells. Somatostatin was detected in immersion fixed human embryonic stem cells differentiated to pancreatic cells using Rat Anti-Human Somatostatin Monoclonal Antibody (Catalog # MAB2358) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to cell membranes and cytoplasm. View our protocol for [Fluorescent ICC Staining of Stem Cells on Coverslips](#).

Immunocytochemistry



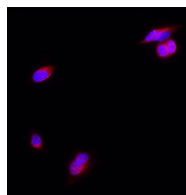
Somatostatin in βTC-6 Mouse Cell Line. Somatostatin was detected in immersion fixed βTC-6 mouse beta cell insulinoma cell line using Rat Anti-Human Somatostatin Monoclonal Antibody (Catalog # MAB2358) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to cell membranes and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry

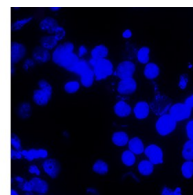


Somatostatin in Human Pancreas. Somatostatin was detected in immersion fixed paraffin-embedded sections of human pancreas using Rat Anti-Human/Mouse Somatostatin Monoclonal Antibody (Catalog # MAB2358) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS017) and counterstained with hematoxylin (blue). Specific staining was localized to islet cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Immunocytochemistry



TT (Positive) cells



K562 (Negative) cells

Detection of Somatostatin in TT human medullary thyroid cancer cell line (Positive) & K562 human chronic myelogenous leukemia cell line (Negative). Somatostatin was detected in immersion fixed TT human medullary thyroid cancer cell line (Positive) & K562 human chronic myelogenous leukemia cell line (Negative) using Rat Anti-Human/Mouse Somatostatin Monoclonal Antibody (Catalog # MAB2358) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE**Reconstitution** Reconstitute at 0.5 mg/mL in sterile PBS.**Shipping** 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**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Somatostatin (SST), also known as SMST, is a 116 amino acid (aa) peptide hormone protein and shares 96% aa identity with mouse and rat SST. It exists as a preproprotein that is cleaved into a proprotein form and then subsequently into 14 aa and 28 aa active peptide forms. SST is secreted by many tissues throughout the body and inhibits the secretion of many other hormones. Some of its major roles are inhibiting growth hormone secretion by the pituitary gland, insulin and glucagon secretion in pancreatic islets, and secretion of gastrointestinal tract hormones such as gastrin. Additionally, SST has been shown to have neuromodulatory activity.