

Somatostatin Receptor 2 Antibody

Rabbit mAb Catalog # AP90418

Specification

Somatostatin Receptor 2 Antibody - Product Information

Application WB, IHC, IP
Primary Accession P30874
Reactivity Rat

Clonality Monoclonal

Other Names

SSTR2; somatostatin receptor 2; SS 2 R; SS2R; SRIF 1; SS2 R;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 41333 Da

Somatostatin Receptor 2 Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500

IP~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

Somatostatin Receptor 2

Description Somatostatin acts at many sites to inhibit

the release of many hormones and other secretory proteins. The biologic effects of somatostatin are probably mediated by a family of G protein-coupled receptors that are expressed in a tissue-specific manner. SSTR2 is a member of the superfamily of receptors having seven transmembrane segments and is expressed in highest

levels in cerebrum and kidney.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

Somatostatin Receptor 2 Antibody - Protein Information

Name SSTR2

Function

Receptor for somatostatin-14 and -28. This receptor is coupled via pertussis toxin sensitive G proteins to inhibition of adenylyl cyclase. In addition it stimulates phosphotyrosine phosphatase and PLC via pertussis toxin insensitive as well as sensitive G proteins. Inhibits calcium entry by



suppressing voltage-dependent calcium channels. Acts as the functionally dominant somatostatin receptor in pancreatic alpha- and beta-cells where it mediates the inhibitory effect of somatostatin-14 on hormone secretion. Inhibits cell growth through enhancement of MAPK1 and MAPK2 phosphorylation and subsequent up-regulation of CDKN1B. Stimulates neuronal migration and axon outgrowth and may participate in neuron development and maturation during brain development. Mediates negative regulation of insulin receptor signaling through PTPN6. Inactivates SSTR3 receptor function following heterodimerization.

Cellular Location

Cell membrane; Multi-pass membrane protein. Cytoplasm. Note=Located mainly at the cell surface under basal conditions. Agonist stimulation results in internalization to the cytoplasm

Tissue Location

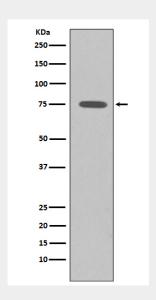
Expressed in both pancreatic alpha- and beta-cells (at protein level). Expressed at higher levels in the pancreas than other somatostatin receptors. Also expressed in the cerebrum and kidney and, in lesser amounts, in the jejunum, colon and liver. In the developing nervous system, expressed in the cortex where it is located in the preplate at early stages and is enriched in the outer part of the germinal zone at later stages. In the cerebellum, expressed in the deep part of the external granular layer at gestational week 19. This pattern persists until birth but disappears at adulthood

Somatostatin Receptor 2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Somatostatin Receptor 2 Antibody - Images



Western blot analysis of SSTR2 expression in K562 cell lysates.