

Anti-Somatostatin Receptor 2 Antibody
Catalog # ABO11004**Specification**

Anti-Somatostatin Receptor 2 Antibody - Product Information

Application	WB
Primary Accession	P30874
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Somatostatin receptor type 2(SSTR2) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Somatostatin Receptor 2 Antibody - Additional Information

Gene ID 6752

Other Names

Somatostatin receptor type 2, SS-2-R, SS2-R, SS2R, SRIF-1, SSTR2

Calculated MW

41333 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse

Subcellular Localization

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

Tissue Specificity

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.

.

Protein Name

Somatostatin receptor type 2(SS-2-R/SS2-R/SS2R)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human Somatostatin Receptor 2(184-198aa RSNQWGRSSCTINWP), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-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

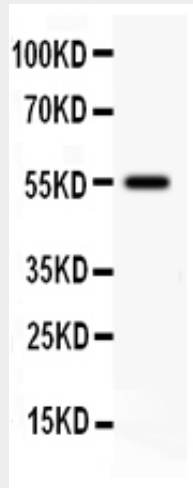
Anti-Somatostatin Receptor 2 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Somatostatin Receptor 2 Antibody - Images



Anti- SSTR2 antibody, ABO11004, Western blottingAll lanes: Anti SSTR2 (ABO11004) at 0.5ug/mlWB: Rat Lung Tissue Lysate at 50ugPredicted bind size: 41KDObserved bind size: 55KD

Anti-Somatostatin Receptor 2 Antibody - Background

SSTR2(Somatostatin receptor type 2) is a protein that in humans is encoded by the SSTR2 gene. 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. Stable SSTR2 transfection of human pancreatic cells, which do not endogenously express SSTR2, inhibits cell proliferation, tumorigenicity, and metastasis. These effects occur as a consequence of an autocrine SSTR2-dependent loop, whereby SSTR2 induces expression of its own ligand, somatostatin.SSTR2 mRNA was variably expressed in all neuroblastoma tumors with a relevant reduction in the more advanced stage.