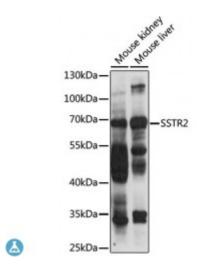
Anti-SSTR2 Antibody



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.

Model STJ117295

Host Rabbit

Reactivity Mouse

Applications WB

Immunogen A synthetic peptide corresponding to a sequence within amino acids 300 to the

C-terminus of human SSTR2 (NP_001041.1).

Gene ID 6752

Gene Symbol SSTR2

Dilution range WB 1:500 - 1:2000

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 g

Purification Affinity purification

Note For Research Use Only (RUO).

Protein Name Somatostatin receptor type 2 SS-2-R SS2-R SS2R SRIF-1

Molecular Weight 41.333 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:11331OMIM:182452Reactome:R-HSA-375276

Alternative Names Somatostatin receptor type 2 SS-2-R SS2-R SS2R SRIF-1

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 Localization Cell membrane

Post-translational Phosphorylated on serine and threonine residues in response to agonist stimulation, leading to receptor desensitization and rapid internalization,

Phosphorylated to a greater extent on serine than threonine residues, Threonine phosphorylation is required for arrestin binding and receptor

endocytosis but is not necessary for desensitization,