

SSTR2 Antibody (Cytoplasmic Domain)

Rabbit Polyclonal Antibody Catalog # ALS10240

Specification

SSTR2 Antibody (Cytoplasmic Domain) - Product Information

IHC-P Application **Primary Accession** P30874

Reactivity Human, Mouse, Rabbit, Hamster, Monkey,

Pig, Chicken, Horse, Bovine, Guinea Pig,

Dog **Rabbit**

Host Clonality **Polyclonal** Calculated MW 41kDa KDa Dilution IHC-P~~N/A

SSTR2 Antibody (Cytoplasmic Domain) - Additional Information

Gene ID 6752

Other Names

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

Target/Specificity

Human SSTR2. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

SSTR2 Antibody (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

SSTR2 Antibody (Cytoplasmic Domain) - 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

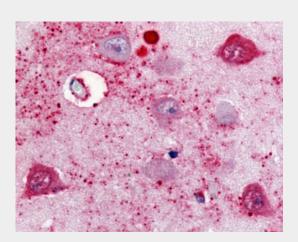
Volume 50 µl

SSTR2 Antibody (Cytoplasmic Domain) - 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

SSTR2 Antibody (Cytoplasmic Domain) - Images



Anti-SSTR2 antibody ALS10240 IHC of human brain, subiculum neurons.

SSTR2 Antibody (Cytoplasmic Domain) - Background

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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.

SSTR2 Antibody (Cytoplasmic Domain) - References

Yamada Y., et al. Proc. Natl. Acad. Sci. U.S.A. 89:251-255(1992). Petersenn S., et al. Mol. Cell. Endocrinol. 157:75-85(1999). Kopatz S.A., et al. Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases. Suwa M., et al. Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004).