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Somatostatin Receptor 2 Antibody

Rabbit mAb
Catalog # AP90418

Product Information

Application	WB, IHC, IP
Primary Accession	P30874
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	SSTR2; somatostatin receptor 2; SS 2 R; SS2R; SRIF 1; SS2 R;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	41333

Additional Information

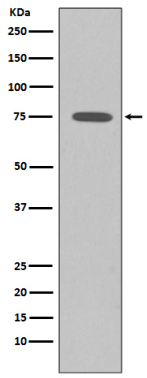
Dilution	WB 1:1000~1:2000 IHC 1:50~1:200 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Somatostatin Receptor 2
Description	Somatostatin acts at many sites to inhibit the release of many hormones and other secretory proteins. The biologic effects of somatostatin 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.

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

Images



Western blot analysis of SSTR2 expression in K562 cell lysates.

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