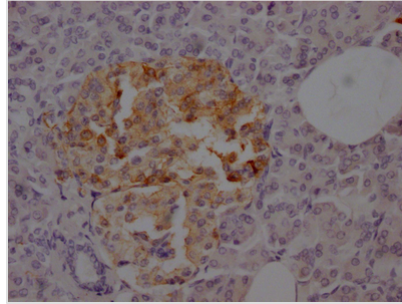




SSTR2 Recombinant Monoclonal Antibody

Product Code	CSB-RA827375A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P30874
Immunogen	A synthesized peptide derived from human Somatostatin Receptor 2
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience; Cancer; Metabolism
Gene Names	SSTR2
Clone No.	1C3
Image	



IHC image of CSB-RA827375A0HU diluted at 1:100 and staining in paraffin-embedded human pancreatic tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The recombinant SSTR2 antibody was prepared by obtaining the antibody genes, cloning the genes into a plasma vector to construct vector clone, transfecting the vector clone into a mammalian cell line for transient expression, and purifying the antibody by affinity-chromatography. This recombinant SSTR2 antibody has been verified to detect the SSTR2 protein from Human in the ELISA, IHC.

Upon activation by somatostatin or its synthetic analogs, SSTR2 mediates multiple physiological effects, such as regulating the physiologic secretion of insulin, glucagon, thyroid-stimulating hormone, and growth hormone (GH), as well as protecting retina nerves and modulating neuronal excitability. SSTR2 also takes part in cell cycling, angiogenesis, apoptosis, and growth factor signaling. Evidence has demonstrated that SSTR2 is overexpressed in neuroendocrine neoplasms and is remarkably methylated in colorectal cancer as well as correlates to tumorigenesis in gastric and breast cancer.