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Somatostatin Receptor 2 Rabbit pAb

Catalog # AP99799

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P30874
Other Accession	P30874
Reactivity	Human
Predicted	Rat, Pig, Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41333
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Somatostatin Receptor 2
Epitope Specificity	51-150/369
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the G-protein coupled receptor 1 family.
SUBUNIT	The C-terminus interacts with SHANK1 PDZ domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Somatostatin is a tetradecapeptide that is widely distributed in the body and is one of five receptor subtypes termed SSTr1-. These receptors function in the regulation of numerous phsiological processes such as the secretion of insulin, glucagon and growth hormone as wel as cell growth induced by neuronal excitation in both the central and peripheral nervous systems. Somatostatin receptos are activated via sonatostatin secreted by nerve and endocrine cells. Somatostatin Receptor 2 (SSR2), along with SSR1, is expressed at the highest levels in the stomach and jejunum, cerebrum and kidney, respectively.

Additional Information

Gene ID	6752
Other Names	SST2; SRIF-1; SS2R; SSTR-2; Smstr-2; Smstr2; SSR2_HUMAN; SSTR2; SS-2-R; SS2-R; SSR2_MOUSE; SSR2_RAT; somatostatin receptor 2
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.