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SSTR2 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI14422

Product Information

Application	WB
Primary Accession	P30874
Other Accession	NM_001050, NP_001041
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Guinea Pig, Horse, Bovine, Sheep
Predicted	Mouse, Rat, Rabbit, Chicken, Dog, Guinea Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41333

Additional Information

Gene ID	6752
Other Names	Somatostatin receptor type 2, SS-2-R, SS2-R, SS2R, SRIF-1, SSTR2
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-SSTR2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	SSTR2 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

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

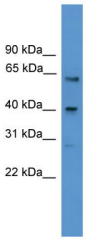
Tissue Location

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

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).

Images



WB Suggested Anti-SSTR2 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:1562500
Positive Control: Human Muscle

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