

Product datasheet for **TA329051**

Sstr4 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide DTRPARGGEAVAC, corresponding to amino acid residues 182-194 of rat SSTR4 (Accession # P30937). 2nd extracellular loop.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	somatostatin receptor 4
Database Link:	NP_037168 Entrez Gene 25555 Rat P30937



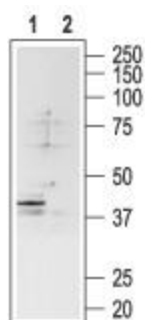
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Background:

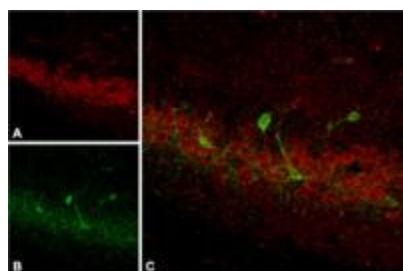
Somatostatin (SST) is a small cyclic peptide that was first identified as a powerful inhibitor of the secretion of various hormones including growth hormone (GH), thyroid-stimulating hormone (TSH) and prolactin from the pituitary, as well as practically every major hormone from the intestinal tract. SST consists of two major bioactive forms, SST-14 and the N-terminus extended peptide SST-28 that can be produced by a wide variety of neuroendocrine, inflammatory and immune cells. In target cells SST induces a variety of physiological functions that include neuromodulation, cell secretion, cell proliferation and smooth muscle contractility. SST acts on its multiple cell targets via a family of six receptors that originate from five genes: SSTR1, SSTR2a, SSTR2b, SSTR3, SSTR4, SSTR5. The SSTRs are members of the G-protein coupled receptor superfamily and they modulate cell response via multiple second messenger systems such as inhibition of adenylate cyclase, modulation of conductance of ion channels and protein dephosphorylation. SSTRs are expressed widely in both the brain and peripheral tissues but with receptor subtype variations between the different cell types. Thus, SSTR4 is the least SSTR subtype expressed in the brain but is most strongly expressed in the lung, heart and placenta. Strong SSTR expression has been detected in a variety of human tumors including pancreatic, breast, lung and prostate cancers. In fact, SST has been shown to inhibit the growth of various normal and tumor cells. On this basis, several long lasting SST analogs have been developed and are being tested for use in several pathologies such as various cancers, acromegaly, immunoproliferative disorders, diabetic retinopathy, epilepsy and pain.

Synonyms:

SS4R

Product images:

Western blot analysis of rat brain lysate: 1. Anti-Somatostatin Receptor Type 4 (extracellular) antibody, (1:200). 2. Anti-Somatostatin Receptor Type 4 (extracellular) antibody, preincubated with the control peptide antigen.



Expression of SSTR4 in rat hippocampus. Immunohistochemical staining of rat hippocampus using Anti-Somatostatin Receptor Type 4 (extracellular) antibody. A. SSTR4 appears in the pyramidal layer (red). B. Staining of interneurons with mouse anti parvalbumin (PV, green). C. Confocal merge of SSTR4 and PV demonstrates separate localization in hippocampus.