

Product datasheet for **TA329050**

Sstr3 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:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide KVRSTTRRVRAPSC, corresponding to amino acid residues 233-246 of rat SSTR3. Intracellular, between transmembrane domains 5 and 6.
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 3
Database Link:	NP_598206 Entrez Gene 20607 Mouse Entrez Gene 171044 Rat P30936



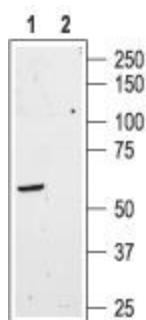
[View online »](#)

Background:

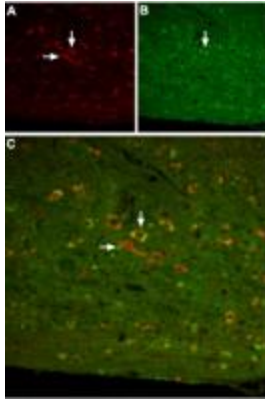
Somatostatin (SST) is a small cyclic peptide that was first identified as a powerful inhibitor of the secretion of various hormones including growth hormone (GH), thyroid-stimulating hormone (TSH) and prolactin from the pituitary, as well as practically every major hormone from the intestinal tract. 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. SST induces in target cells a variety of physiological functions that include neuroendocrine modulation, cell secretion, cell proliferation and smooth muscle contractility. SST acts on its multiple cell targets via a family of six receptors that are originated 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, SSTR3 expression in the brain is primarily concentrated in the cerebellum with lesser expression in peripheral organs such as the spleen, the liver and the pituitary. 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:

OTTHUMP00000197771; SS3R; SSR-28

Product images:

Western blot analysis of rat brain lysate: 1. Anti-Somatostatin Receptor Type 3 antibody, (1:200). 2. Anti-Somatostatin Receptor Type 3 antibody, preincubated with the control peptide antigen.



Expression of SSTR3 in mouse cerebellum. Immunohistochemical staining of mouse cerebellum with Anti-Somatostatin Receptor Type 3 antibody. A. SSTR3 appears in Purkinje cells (red, arrow points at an example). B. Staining of Purkinje nerve cells with mouse anti parvalbumin (a calcium binding protein, green). C. Confocal merge of SSTR3 and parvalbumin demonstrates the co-localization of these proteins in Purkinje cells (arrow points at a Purkinje cell pointed at in A and B).