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**Antibody to Somatostatin Receptor-1 (SSTr1)
RABBIT POLYCLONAL**

Catalog Number: AB-N19
Quantity: 100 microliters
Format: Liquid antisera, no preservative
Host: Rabbit
Immunogen: peptide corresponding to the extracellular domain of rat SSTr1 conjugated to keyhole limpet hemocyanin (KLH)

Background:

Somatostatin Receptor-1 is one of five receptor subtypes termed SSTr1-5. They are G-protein-coupled receptors characterized by seven transmembrane helices with an extracellular amino terminal domain and an intracellular carboxy terminus. These receptors function in the regulation of numerous physiological processes such as the secretion of insulin, glucagon, and growth hormone, as well as cell growth induced by neuronal excitation in both the central and peripheral nervous system. Somatostatin receptors are activated via somatostatin secreted by nerve and endocrine cells.

Specificity and Preparation:

This antibody was raised against rat somatostatin receptor-1 (SSTr1) and recognizes SSTr1 in human. The somatostatin receptor antisera was developed in rabbit using a peptide corresponding to the extracellular domain conjugated to keyhole limpet hemocyanin (KLH) for immunization. The antibody is routinely tested by immunoblotting.

Usage and Storage:

Applications include ELISA (ATS in-house; 1:500) and immunoblotting using a dilution of 1:500-1:1,000 where a band is seen at 53 kDa in Mia PaCa-2 cell membrane extracts representing SSTr1. This is consistent with the glycosylated form of the receptor,¹ though lower than 60 kDa reported elsewhere.^{2,3} Store the antibody at -20°C for one year. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

Available Control(s): SSTr1 peptide



Lane 1: Molecular weight standards (Invitrogen SeeBlue)
Lane 2: 111 μ g of Mia PaCa-2 (human pancreatic cells) cell membrane extract probed with AB-N19 at a 1:100 dilution.

References:

1. Helboe L, Moller M, Norregaard L, Schiodt M, Stidsen CE (1997) Development of selective antibodies against the human somatostatin receptor subtypes sst1-sst5. *Brain Res Mol Brain Res* 49(1-2):82-88.
2. Gu YZ, Brown PJ, Loose-Mitchell DS, Stork PJ, Schonbrunn A (1995) Development and use of a receptor antibody to characterize the interaction between somatostatin receptor subtype 1 and G proteins. *Mol Pharmacol* 48(6):1004-1014.
3. Hadcock JR, Strnad J, Eppler CM (1994) Rat somatostatin receptor type 1 couples to G proteins and inhibition of cyclic AMP accumulation. *Mol Pharmacol* 45(3):410-416.