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**Antibody to Somatostatin-14
RABBIT POLYCLONAL**

Catalog Number: AB-04
Quantity: 100 microliters
Format: Liquid antisera, no preservative
Host: Rabbit
Immunogen: [Tyr¹⁰] somatostatin-14

Background:

Somatostatin was first characterized as the major physiological inhibitor of growth hormone release (somatotropin) from the pituitary, but has subsequently been shown to inhibit the release of many other physiologically important compounds, including insulin, glucagon, gastrin and secretin. It is therefore a major factor in the control of metabolism. It also functions in the central nervous system as a neurotransmitter/neuromodulator in the control of motor activity and cognitive functions; it may be involved in epilepsy and in Alzheimer's disease. This gastrointestinal and hypothalamic peptide hormone is in two forms (14 and 28 residues) and is found in gastric mucosa, pancreatic islets, nerves of the gastrointestinal tract, posterior pituitary and in the central nervous system. Somatostatin analogues have antiproliferative effects and are now used in the treatment of several forms of cancer. Somatostatin binds to glycoprotein receptors of the seven transmembrane domain superfamily on target cells.

Specificity and Preparation:

This antibody recognizes mammalian somatostatin-14. [Tyr¹⁰] somatostatin-14 was used as immunogen. The antibody is routinely tested by dot blot.

Usage and Storage:

Applications include immunostaining (1:200 to 1:600)¹ and immunoblotting (1:35,000).² Store the antibody at 4°C for one month or -20°C in undiluted aliquots for one year. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

References:

1. Bloch B, Gaillard RC, Brazeau P, Lin HD, Ling N (1984) Topographical and ontogenetic study of the neurons producing growth hormone-releasing factor in human hypothalamus. *Regul Pept* 8(1):21-31.
2. Benoit R, Ling N, Alford B, Guillemin R. (1982) Seven peptides derived from pro-somatostatin in rat brain. *Biochem Biophys Res Commun* 107(3):944-950.