

## Product Information

### Anti-Somatostatin Receptor Type 2

produced in rabbit, affinity isolated antibody

Catalog Number **S0694**

Synonyms: Anti-SS2R; Anti-SSTR2a

#### Product Description

Anti-Somatostatin Receptor Type 2 was produced in rabbit using as immunogen a synthetic peptide, (C)ERSDSKQDKSRLNETTETQRT, corresponding to amino acids 339-359 of rat somatostatin receptor type 2 with an additional N-terminal cysteine. The epitope is highly conserved in human, mouse, bovine and pig (all identical) antigens. The antibody was affinity isolated on immobilized immunogen.

Anti-Somatostatin Receptor Type 2 specifically recognizes the Somatostatin Receptor Type 2 in rat brain membranes by immunoblotting.

Somatostatin is a small cyclic peptide that is widely expressed throughout the central nervous system and peripheral tissues.<sup>1</sup> In peripheral tissues, somatostatin exerts inhibitory effects on secretion processes, whereas in the brain it acts as a neurotransmitter in both a stimulatory and inhibitory manner.<sup>1,2</sup> Somatostatin mediates its action via six high affinity G-protein coupled receptors (SSTR1, SSTR2a, SSTR2b, SSTR3, SSTR4 and SSTR5) which are encoded by five genes.<sup>1,2</sup> Expression of the different receptors is developmentally regulated in a time and tissue-specific manner.<sup>2</sup> Somatostatin receptors have been found on a variety of neuroendocrine tumors, such as paragangliomas, carcinoids and breast tumors.<sup>3</sup> Synthetic peptide derivatives of somatostatin have been successfully used in the treatment of neuroendocrine malignancies and in *in vivo* imaging of tumors that are positive to somatostatin receptors.<sup>4</sup>

#### Reagents

Supplied lyophilized from phosphate buffered saline, pH 7.4, with 1% bovine serum albumin and 0.05 % sodium azide as preservative.

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Preparation Instructions

Reconstitute the lyophilized vial with 0.05 ml or 0.2 ml deionized water, depending on the package size purchased. Antibody dilutions should be made in buffer containing 1-3 % bovine serum albumin.

#### Storage/Stability

Lyophilized powder can be stored intact at room temperature for several weeks. For extended storage, it should be stored at -20 °C or below. The reconstituted solution can be stored at 2-8 °C for up to 2 weeks. For longer storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Centrifuge all antibody preparations before use (10000 x g 5 min). Working dilution samples should be discarded if not used within 12 hours.

**Product Profile**

Immunoblotting: the recommended working dilution is 1:200

**Note:** In order to obtain best results and assay sensitivities of different techniques and preparations, we recommend determining optimal working dilutions by titration test.

**References**

1. Hofland L.J. and Lamberts, S.W.J. *Annals of Oncology*, **12**, S31 (2001).
2. Fombonne, J., et al., *Rep. Biol. Endocrinol.*, **1**, 19 (2003).
3. Slooter, G. D., et al., *Br. J. Surg.*, **88**, 31,(2001).
4. Schulz, S., et al., *Gynecologic Oncology*, **84**, 235 (2002).

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