

Product Information

Anti-Neurotensin/NTS antibody, Mouse monoclonal
clone NTS-11, hybridoma cell culture supernatant

Product Number **SAB4200703**

Product Description

Anti-Neurotensin/NTS antibody, Mouse monoclonal (mouse IgG1 isotype) is derived from the NTS-11 hybridoma, produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mouse immunized with synthetic peptide from C-terminal region of human Neurotensin (GenelD: 4922), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells.

Anti-Neurotensin/NTS antibody, Mouse monoclonal recognizes Neurotensin and Neurotensin precursor from human, and rat origin. The product may be used in several immunochemical techniques including Immunoblotting (detection of Neurotensin precursor ~20 kDa) and Immunohistochemistry. Detection of the Neurotensin precursor band by Immunoblotting is specifically inhibited by the immunogen.

Neurotensin (also known as NTS or NT) is a 13 amino acid brain-gut peptide that function as a neurotransmitter/neuromodulator in the central nervous system (CNS) and as an endocrine agent in the gastrointestinal (GI) tract.¹⁻² Neurotensin is synthesized as part of a larger precursor (known as Neurotensin precursor) which is cleaved by prohormone convertase to generate Neurotensin and two other peptides: Neuromedin N, a six amino acid neurotensin-like peptide and large Neuromedin N, a larger variation of Neuromedin N. Neurotensin is involved in a variety of physiological processes such as locomotion, reward, stress and pain modulation, pathophysiology of drug addiction, depression, schizophrenia and Parkinson disease.³⁻⁴ In the brain, Neurotensin modulates dopaminergic transmission in the nigrostriatal and mesocorticolimbic pathways as well as hormone secretion from the anterior pituitary.⁵ In the GI tract, Neurotensin is localized to endocrine cells of the small bowel and is responsible for stimulation of pancreatic and biliary secretion, and growth stimulation of various normal tissues.⁶ NTS induces various oncogenic effects in tumors and in cancer cells from diverse origins, the NTS/NTSR1 (NTS receptor) complex has been proposed as a possible target for cancer therapy.⁶⁻⁷

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

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

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 5-10 µg/mL is recommended using whole extract of SK-N-SH cells.

Immunohistochemistry: a working concentration of 10-20 µg/mL is recommended using heat-retrieved formalin-fixed, paraffin-embedded rat brain sections.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

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