

Product Information

Monoclonal Anti-NRSN2, clone NS432

produced in mouse, purified immunoglobulin

Catalog Number **SAB4200414**

Product Description

Monoclonal Anti-NRSN2 (mouse IgG1 isotype) is derived from the hybridoma NS432 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to a sequence at the C-terminus human NRSN2 (GeneID: 80023). The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-NRSN2 recognizes human rat and mouse NRSN2. The antibody may be used in various immunochemical techniques including immunoblotting (~ 35 kDa). Staining of the NRSN2 band in immunoblotting is specifically inhibited by the immunizing peptide.

NRSN2, also called Neurensin-2, encodes a small neuronal membrane protein showing high sequence homology to Neuro-p24/Neurensin-1. Its mRNA is expressed only in the brain whereas the protein is expressed in various neurons including those of the thalamus/hypothalamus and hippocampus of postnatally developing mice. Immunochemical staining of mouse brain revealed that NRSN2 is distributed similarly to Neurensin-1 in many regions such as the diagonal band, hippocampus, amygdaloid nucleus, and habenula nucleus, but different in the intracellular localization as follows: Neurensin-1 is found mainly in neuritic processes, while Neurensin-2 is found in cell bodies, suggesting their separate regulation.¹ Interestingly, NRSN2 has also been implicated as a possible tumor suppressor gene for hepatocellular carcinoma HCC and a candidate biomarker for long-term survival in HCC.²

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 Material 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 at -20 °C 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. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 2.0-4.0 µg/mL is recommended using whole extracts of THP-1 cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Nakanishi, K., et al., *Brain Res.*, **1081**, 1-8 (2006).
2. Ma, H.Q., et al., *World J. Gastroenterol.*, **15**, 4844-4848 (2009).

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