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Product Information

MONOCLONAL ANTI-N CAM
(Neural Cell Adhesion Molecule)
Clone NCAM-OB11
Mouse Ascites Fluid

Product Number **C 9672**

Product Description

Monoclonal Anti-N-CAM (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. A growth cone enriched plasma membrane fraction from E17 rat forebrain was used as the immunogen. The isotype is determined using Sigma ImmunoType™ Kit (Product Code ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Product Code ISO-2).

Monoclonal Anti-N-CAM localizes the high molecular weight isoform of N-CAM (neural cell adhesion molecule) in human and several other mammalian species. The antibody shows a strong reaction to N-CAM A/N-CAM 180, however it also recognizes N-CAM B/N-CAM 140. In an immunoblot, the product reacts with polysialated N-CAM in embryonic material. Breakdown products of N-CAM may be stained; they appear as bands lower than 100 kD on the immunoblot.

Neural cell adhesion molecule (N-CAM), the best characterized CAM, exists in adult brain as a family of sialoglycoproteins of molecular weights 180 kDa, 140 kDa and 120 kDa, which arise from alternative splicing of mRNA transcribed from a single gene. N-CAMs are believed to be involved in cell-cell interactions and probably play an important role in embryogenesis and development.

Immunocytochemical data indicate that in the adult, N-CAM is expressed mainly in cells of the nervous system. There are indications that N-CAM may be expressed by non-neural cells in the adult, as it has been found in studies of various embryonic developmental stages.

Reagents

The product is provided as ascites fluid with 0.1% sodium azide as a preservative

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS 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, solution may be frozen in working aliquots. Repeated freezing and thawing is **not** recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

Product Profile

The minimum antibody titer of 1:100 was determined by immunoblotting using freshly prepared extract from newborn and adult rat brain.

In order to obtain best results in different cell or tissue preparations, it is recommended that each individual user determine their optimum working dilution by titration assay.

References

1. Neill, J.M. and Barnstable, C.J., Exp. Eye Res. **51**, 573(1990).
2. Naegele, J.R., and Narnstable C.J., Brain Res., **559**, 118 (1991)
3. Schlossman S.F., et al., Leukocyte Typing V, (No. NK68) Oxford University Press, Oxford, (1995).

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