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ProductInformation

MONOCLONAL ANTI-t (Tau) CLONE TAU-2
Mouse Ascites Fluid

Product No. **T 5530**

Product Description

Monoclonal Anti-τ (TAU) (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Purified bovine microtubule associated proteins (MAPs) were used as immunogens. 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-τ is immunospecific for the Tau protein as determined by an immunoblot technique. Monoclonal Anti-τ reacts exclusively with the chemically heterogenous Tau; it appears as several electrophoretic species on one-dimensional SDS polyacrylamide gells (55kDa - 62kDa). The product localizes Tau proteins along microtubules in axons, somata, dendrites, astrocytes and on ribosomes (polysomes). Monoclonal Anti-τ reacts with bovine, human, monkey and chicken tissue or cells, but not with rat or mouse tissue or cells. It has been applied in immunohistology using fluorescent or peroxidase staining techniques, and in immunoblotting or dot blotting methods. The product is phosphatase independent; it will bind Tau proteins in either their phosphorylated or non-phosphorylated forms. The product will stain Tau proteins in formalin-fixed, paraffin-embedded sections of human or animal tissue. Monoclonal Anti-τ does not stain tubulin or other microtubule associated proteins.

The best known microtubule associated proteins (MAPs) which copurify with microtubules are MAP2 and Tau. These two proteins are heat stable and stimulate formation of the microtubule polymer from purified tubulin subunits. Tau is chemically heterogenous, however, limited protolysis has demonstrated that the different eletrophoretic species are closely related. Tau is immunologically distinct from the other MAPs, namely MAP1, MAP2 and MAP5. Localization studies have demonstrated that Tau is intimately associated with the filamentous structures which compose the neurofibrillary tangles as found in an Alzheimer's disease brain.

Monoclonal Anti-τ maybe used to study MAP expression and cytological localization in various tissue and cell lines, under different developmental and environmental circumstances.

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.

Product Profile

A working dilution of at least 1:1000 was determined by indirect immunoblotting using fresh total bovine brain extract or an enriched microtubule protein preparation. In order to obtain best results, it is recommended that each individual user determine the optimum working dilution for their system by titration assay.

Storage

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.

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