SIGMA-ALDRICH®

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Product Information

Anti-T (Tau) antibody produced in rabbit delipidized, whole antiserum

Catalog Number T6402

Product Description

Antiserum is produced in rabbit using tau proteins from chicken embryo brain as the immunogen.

Rabbit Anti-T (tau) stains tau proteins using total chicken brain tissue extracts in an immunoblot assay. It also displays species reactivity with mouse and rat. Antiserum does not stain MAP1, MAP2, or tubulin.

The cytoskeleton consists of extensive and intermeshed networks of filaments which traverse the cytoplasm of eukaryotic cells and interconnect a variety of cytoplasmic structures. There are three major cytoskeletal networks, each with its own particular composition and organization: Microtubules; composed predominately of tubulin and MAPs, microfilaments; composed of actin and actin-binding proteins, and Intermediate filaments; composed of several cell-type specific subunits, including vimentin, desmin, cytokeratin, neurofilament proteins, and glial fibrillary acidic proteins.

Microtubules function as structural and mobility elements in mitosis, intracellular transport, flagellar movement, and in the cytoskeleton. These intracellular cylindrical filamentous structures are present in almost all eukaryotic cells. Tubulin is the major building block of microtubules. A variety of proteins have been identified that co-purify with tubulin through repetitive cycles of microtubule assembly and disassembly *in vitro* commonly called microtubule-associated proteins (MAPs).

There are two major classes of heat stable MAPs: MAP2 with a molecular mass of 28 kDa and tau with a molecular mass of 55-65–kDa. Both classes of heat stable MAPs have a role in the regulation of microtubule polymerization in cells. Both tau and MAP2 associate with the sides of microtubules. Nearly all mammalian and avian cells and tissues can be stained for MAPs by immunofluorescent methods.

Reagent

Antiserum has been treated to remove lipoproteins and is supplied as a liquid with 15 mM sodium azide as a preservative.

Precautions

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

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, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

Product Profile

Indirect immunoblot: a minimum working dilution of 1:100 was determined using rat or mouse brain tissue extract.

<u>Note</u>: In order to obtain best results, it is recommended that each individual user determine their optimum working dilution by titration assay.

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