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Product Information

Monoclonal Anti-Tau, Second Repeat Clone DC 4R

produced in mouse, purified immunoglobulin

Catalog Number **T7826**

Product Description

Monoclonal Anti-Tau, Second Repeat, Clone DC 4R (IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma NSO cells and BALB/c mice immunized with human recombinant tau protein.

The antibody recognizes 4-repeat isoforms of tau, 45-68 kDa. It reacts with human, pig and rat tau. The antibody has been used in immunoblotting, immunohistochemistry and ELISA applications.

Tau is a neuronal microtubule-associated protein found predominantly on axons. The function of tau is to promote tubulin polymerization and stabilize microtubules. Tau, in its hyperphosphorylated form, is the major component of paired helical filaments (PHF), the building block of neurofibrillary lesions in Alzheimer's disease (AD) brain. Hyperphosphorylated tau is also found in neurofibrillary lesions in a range of other central nervous system disorders. Hyperphosphorylation impairs the microtubule binding function of tau, resulting in the destabilization of microtubules in AD brains, ultimately leading to the degeneration of the affected neurons.

Numerous serine/threonine kinases, including GSK-3 β , protein kinase A (PKA), cyclin-dependent kinase 5 and casein kinase II, phosphorylate tau. To date, a total of 25 abnormal phosphorylation sites have been identified on hyperphosphorylated Tau in AD brain. Normal Tau has ~8 phosphorylation sites.

Reagent

Supplied as a solution in DMEM (without sodium pyruvate and sodium bicarbonate) containing 0.1% thimerosal as a preservative.

Storage/Stability

For extended storage, freeze undiluted at -20°C . 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.

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.

Product Profile

Immunoblotting: a working dilution of 1:4000 was determined using human 4-repeat tau isoforms.
Immunohistochemistry: recommended dilution is 1:1000
ELISA: recommended dilution is 1:8000.

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

References

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