POLYCLONAL ANTIBODY

Anti 4R-tau

Catalog No. TIP-4RT-P01

BACKGROUND

Tau is a microtubule-associated protein. In adult human brain, 6 tau isoforms are expressed, which are divided into two groups, 3-repeat (3R) and 4-repeat (4R) tau isoforms. Tau assembles into insoluble, filamentous, and hyperphosphorylated inclusions in many neurodegenerative diseases, and different tau isoforms are accumulated in the diseased brains, namely, 6 tau isoforms in AD, 3R tau isoforms in Pick’s disease, and 4R tau isoforms in PSP and CBD. Therefore, isoform-specific tau antibodies are useful tools for immunohistochemical and biochemical studies of tau species in diseased brains. Tau deposited in AD is extensively deamidated at N279. This anti-4R specifically recognizes 4R tau isoforms regardless of deamidation and strongly stained tau in AD brain.

Product type
Primary antibody

Immunogen
synthetic N279D 4R-tau peptide (VQIIDKKLDLSNVQSKC)

Raised in
Rabbit

Myeloma
-

Clone number
-

Isotype
-

Source
Anti-serum

Purification
-

Form
Liquid. Anti-serum with 0.1% NaN3 as a preservative

Concentration
-

Volume
50 uL

Label
Unlabeled

Specificity
4R-tau isoforms

Cross reactivity
Human, Mouse, Rat

Storage
Store below -20°C. (below -70°C for prolonged storage). Aliquot to avoid cycles of freeze/thaw.

Application notes

Recommended dilutions

· Western blotting: 1/2000 - 1/5000 (Fig. 1)
· Immunohistochemistry: 1:3000 - 1/20000 (Fig. 2)

Optimal dilutions/concentrations should be determined by the end user.

Other applications have not been tested.

References

Fig1: Immuno blot analysis for 6 kinds of tau isoforms (3-repeat and 4-repeat) with anti total tau (T46) and Anti 4R (TIP-4RT-P01).

Fig2: Immuno staining for paraffin embedded section of cerebral cortex prepared from AD brain (retrieved with proteinase K and formic acid)