# NEUROMICS Neurofibrillary Tangles Data Sheet

Catalog Number: Product Type:	RA19077 Whole Serum Antibody	Host: Species Reactivity:	Rabbit Human
Immunogen Sequence:	Disaggregated paired helical filaments were used as an immunogen. Insoluble NFT which were extracted in boiling sodium dodecyl sulfate, purified by sucrose gradient centrifugation and disaggregated by sonication were used as an immunogen for the preparation of this antibody.	Format:	Liquid. Whole Serum
Applications:	Western blot: 1:500 Immunohistochemistry: 1:200 (formalin-fixed, paraffin-embedded sections) 1:2,000 (paraformaldehyde-fixed, frozen sections).		
Storage:	Dilutions listed as a recommendation. Optimal dilution should be determined by investigator. Maintain at +2-8°C for 3 months or at -20°C for longer periods. Stable for 1 year. Avoid repeated freeze-thaw cycles		
References:	Skrabana, R., Skrabanova-Khuebachova M., Kontsek, P. and Novak M. Alzheimer's-disease- associated conformation of intrinsically disordered tau protein studied by intrinsically disordered protein liquid-phase competitive enzyme-linked immunosorbent assay. Anal Biochem. 2006 Dec 15;359(2):230-7. Arima, K. Ultrastructural characteristics of tau filaments in tauopathies: immuno-electron microscopic demonstration of tau filaments in tauopathies. Neuropathology. 2006 Oct;26(5):475-83.		

### **Application Notes**

This antibody specifically immunostains NFT and degenerating plaque neurites in cases of AD, Down's syndrome and normal aged individuals. NFT are heterogenous in composition and their composition undergoes changes as the tangle matures. This antibody labels all NFT, both intracellular and extracellular, as well as all paired helical filaments (PHF) containing neurites.

#### Description/Data:

The neurofibrillary tangles (NFT) are neuronal inclusions that are the hallmark lesions of Alzheimer's disease (AD). These tangles are made up of paired helical filaments (PHF). The PHF are highly insoluble structures and are known to be composed of a highly phosphorylated form of the microtubule-associated protein tau and may contain associated lipid.

Image: Western blot analysis of Alzheimer disease brain and a purified preparation of disaggregated paired helical filaments (PHF) using Neurofibrillary Tangles Antibody. The majority of insoluble PHF are excluded from the stacking gel (O1) and with the remaining material being excluded from the origin of the separating gel (O2).



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