OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AP01763PU-N

MAPT / TAU pThr231 Rabbit Polyclonal Antibody

Product data:

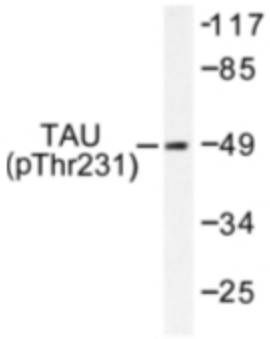
Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	**Western blot**: 1/500-1/1000.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of Tau pThr231 protein.
Formulation:	Phosphate buffered saline (PBS), pH~7.2 containing 0.05% Sodium Azide as preservative. State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Predicted Protein Size:	~ 50-80 kDa
Gene Name:	microtubule associated protein tau
Database Link:	Entrez Gene 4137 Human P10636

View online »

Background: The Tau family of proteins consists of six isoforms, which become abnormally hyperphosphorylated and accumulate in the form of paired helical filaments in the brains of patients with Alzheimer's disease. p-Tau can be dephosphorylated by protein phosphatase PP-2B, PP-2A and PP-1, which are all present in neurons. p-Tau is predominately present in neuronal somata and dendrites and, to a lesser extent in axons. PKN specifically phosphorylates Tau to serve as a regulator of microtubules. The phosphorylation state and distribution of Tau can be modulated by insulin and insulin-like growth factor-1 signaling pathways involving glycogen synthase kinase-3β, suggesting that insulin and insulin-growth factor-1 may contribute to the reorganization of the cytoskeleton, which is necessary for the development and growth of the neurites. 14-3-3 ζ can associate with both Tau and p-Tau that stimulates cAMP-dependent kinase to phosphorylate Tau, suggesting that 14-3-3 ζ is a Tau effector that may be involved in the abnormal Tau phosphorylation.

Synonyms: MAPTL, MTBT1, Microtubule-associated protein tau, PHF-tau, Neurofibrillary tangle protein, Paired helical filament-tau

Product images:



Western blot (WB) analysis of Tau pThr231 antibody (Cat.-No.: AP01763PU-N) in extracts from MDA-MB-435 or K562 or A2780 or COLO205 cells or mouse brain.