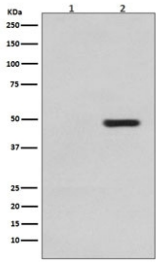
Phospho-Tau Antibody (pT231) [clone EIH-13] (RQ5331)

Catalog No.	Formulation	Size
RQ5331	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

Availability	1-2 weeks
Species Reactivity	Human
Format	Purified
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	EIH-13
Purity	Affinity purified
UniProt	P10636
Applications	Western Blot : 1:500-1:2000
Limitations	This phospho-Tau antibody (pT231) is available for research use only.



Western blot testing of 1) lysate from untreated SH-SY5Y cells and 2) lysate from sorbitol-treated SH-SY5Y cells, with phospho-Tau antibody (pT231). Expected molecular weight: 50-80 kDa.

Description

Tau proteins are proteins that stabilize microtubules. They are abundant in neurons of the central nervous system and are less common elsewhere, but are also expressed at very low levels in CNS astrocytes and oligodendrocytes. Pathologies and dementias of the nervous system such as Alzheimer's disease and Parkinson's disease are associated with tau proteins that have become defective and no longer stabilize microtubules properly.

Tau is a phosphoprotein with 79 potential Serine (Ser) and Threonine (Thr) phosphorylation sites on the longest tau isoform. Phosphorylation has been reported on approximately 30 of these sites in normal tau proteins. Phosphorylation of

tau is regulated by a host of kinases, including PKN, a serine/threonine kinase. When PKN is activated, it phosphorylates tau, resulting in disruption of microtubule organization. Phosphorylation of tau is also developmentally regulated. For example, fetal tau is more highly phosphorylated in the embryonic CNS than adult tau. [Wiki]

Application Notes

Optimal dilution of the phospho-Tau antibody (pT231) should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Tau / MAPT (surrounding pT231) was used as the immunogen for the phospho-Tau antibody.

Storage

Store the phospho-Tau antibody (pT231) at -20oC.