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Rabbit Anti-TTBK1 antibody

SL20200R

Product Name:	TTBK1
Chinese Name:	脑源性tau蛋白激酶抗体
Alias:	BDTK; Brain derived tau kinase; Brain-derived tau kinase; KIAA1855; Tau tubulin kinase 1; Tau-tubulin kinase 1; TTBK1; TTBK1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Dog,Pig,Cow,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TTBK1:864-915/1321
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	TTBK1 (tau tubulin kinase 1), also known as BDTK (brain-derived tau kinase), is a 1,321 amino acid protein that contains one protein kinase domain and belongs to the serine/threonine protein kinase family. Localized to the cytoplasm and expressed at high levels in brain and at lower levels in testis and spinal cord, TTBK1 functions as a serine/threonine kinase that can phosphorylate Tau (a protein involved in tubulin polymerization) on threonine, tyrosine and serine residues. Specifically, TTBK1 uses divalent cations, such as magnesium and manganese, to catalyze the ATP-dependent

transfer of a phosphate group onto Tau, creating a phosphoprotein and ADP. Phosphorylation of Tau causes its aggregation and subsequent loss of function, suggesting an important role for TTBK1 in the control of tubulin dynamics. Two isoforms of TTBK1 are expressed due to alternative splicing events.

Function:
Serine/threonine kinase which is able to phosphorylate TAU on serine, threonine and tyrosine residues. Induces aggregation of TAU.

Subcellular Location:
Cytoplasm.

Tissue Specificity:
Expressed in the brain, particularly in cortical and hippocampal neurons. Weakly expressed in spinal cord and testis. No expression in adipose tissue, bladder, cervix, colon, esophagus, heart, kidney, liver, lung, ovary, placenta, prostate, skeletal muscle, small intestine, spleen, testis, thymus, thyroid or trachea.

Similarity:
Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. Contains 1 protein kinase domain.

SWISS:
Q5TCY1

Gene ID:
84630

Database links:

Entrez Gene: 84630Human

Entrez Gene: 106763Mouse

SwissProt: Q5TCY1Human

SwissProt: Q6PCN3Mouse

Unigene: 485436Human

Unigene: 297613Mouse

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.