

For Research Use Only

TTBK1 Polyclonal antibody

Catalog Number: 32938-1-AP



Basic Information

Catalog Number:

32938-1-AP

Concentration:

550 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG36655

GenBank Accession Number:

BC036764

GeneID (NCBI):

84630

UNIPROT ID:

Q5TCY1

Full Name:

tau tubulin kinase 1

Calculated MW:

142/70 kDa

Observed MW:

200 kDa

Purification Method:

Antigen affinity Purification

Recommended Dilutions:

WB 1:6000-1:12000

Applications

Tested Applications:

WB, ELISA

Species Specificity:

human, mouse, rat

Positive Controls:

WB : SH-SY5Y cells, fetal human brain tissue, mouse brain tissue, rat brain tissue

Background Information

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. The molecular weight observed is consistent with what has been described in PMID:16923168.

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

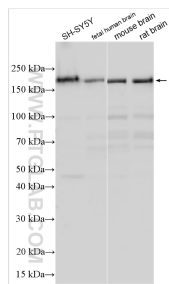
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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 32938-1-AP (TTBK1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.