

## **Product datasheet for TA306722**

## **TTBK1 Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IF, IHC, WB

Recommended Dilution: WB: 1 ug/mL, ICC: 2.5 ug/mL, IF: 20 ug/mL

Reactivity: Human, Mouse

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: TTBK1 antibody was raised against a 16 amino acid peptide near the carboxy terminus of

human TTBK1.

**Formulation:** PBS containing 0.02% sodium azide.

Concentration: 1ug/ul

**Purification:** Affinity chromatography purified via peptide column

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** tau tubulin kinase 1

Database Link: NP 115927

Entrez Gene 106763 MouseEntrez Gene 84630 Human

Q5TCY1



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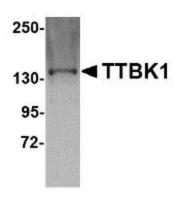
Background:

Tau tubulin kinase (TTBK1) belongs to the casein kinase 1 superfamily and is involved in the phosphorylation of specific serine/threonine residues in paired helical filaments of the tau protein. It is specifically expressed in the brain and induces tau aggregation in human neuronal cells in a dose-dependent manner. TTBK1 levels have been found to be upregulated in the brains of Alzheimer's disease (AD) patients, and mice expressing human TTBK1 protein showed significant age-dependent memory impairment. These mice displayed increased levels of the CDK5 activators p25 and p35, and reduced levels of the NMDA receptor types 2B and 2D, suggesting that TTBK1 may play a role in memory dysfunction in AD patients. Multiple isoforms of TTBK1 are known to exist. This antibody is predicted to not cross-react with TTBK2.

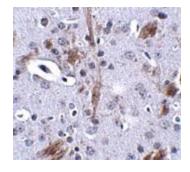
Synonyms: BDTK

**Protein Families:** Druggable Genome, Protein Kinase

## **Product images:**

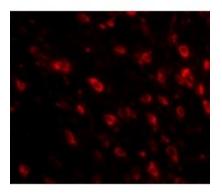


Western blot analysis of TTBK1 in Jurkat lysate with TTBK1 antibody at 1 ug/mL.



Immunohistochemistry of TTBK1 in mouse brain tissue with TTBK1 antibody at 2.5 ug/mL.





Immunofluorescence of TTBK1 in Human Brain tissue with TTBK1 antibody at 20 ug/mL.