

## TTBK1 RABBIT PAB

**Cat.#:** S221062

**Product Name:** Anti-TTBK1 Rabbit Polyclonal Antibody

**Synonyms:** BDTK

**UNIPROT ID:** Q5TCY1 (Gene Accession - NP\_115927 )

**Background:** 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.

**Immunogen:** Synthetic peptide of human TTBK1

**Applications:** ELISA, IHC

**Recommended Dilutions:** IHC: 25-100; ELISA: 2000-5000

**Host Species:** Rabbit

**Clonality:** Rabbit Polyclonal

**Isotype:** Immunogen-specific rabbit IgG

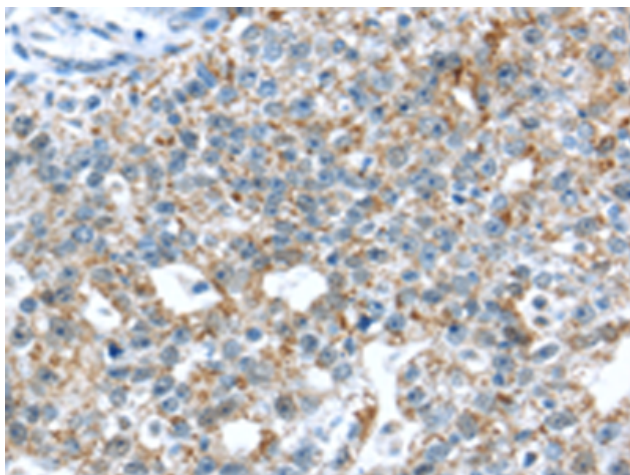
**Purification:** Antigen affinity purification

**Species Reactivity:** Human

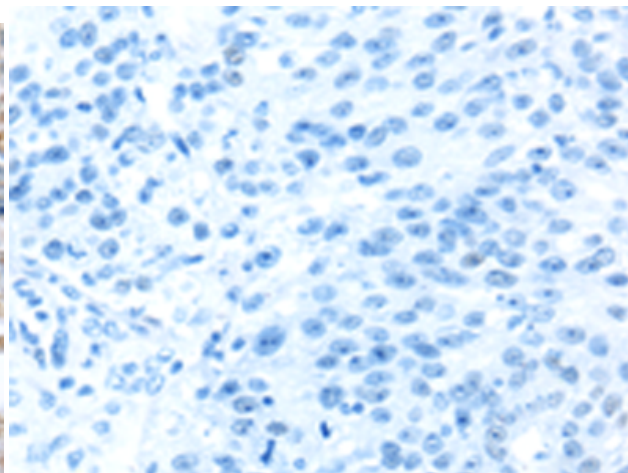
**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

**Research Areas:** Signal Transduction, Neuroscience

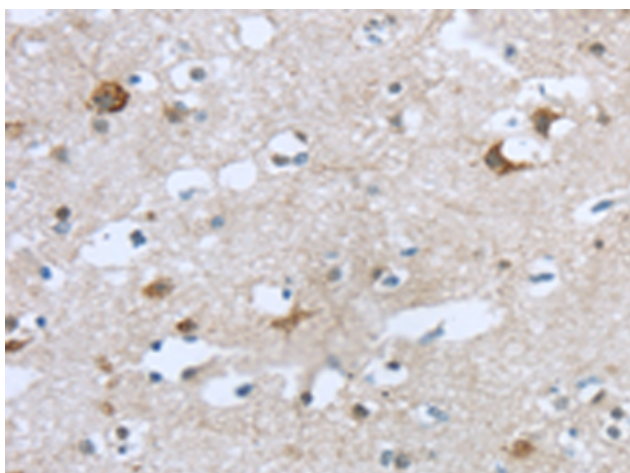
**Storage & Shipping:** Store at -20°C. Avoid repeated freezing and thawing



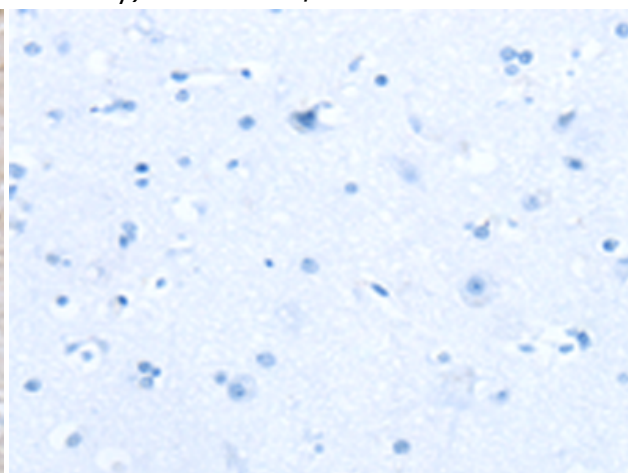
Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue using 221062(TTBK1 Antibody) at a dilution of 1/35(Cytoplasm).



In comparison with the IHC on the left, the same paraffin-embedded Human breast cancer tissue is first treated with the synthetic peptide and then with 221062(Anti-TTBK1 Antibody) at dilution 1/35.



The image on the left is immunohistochemistry of paraffin-embedded Human brain tissue using 221062(Anti-TTBK1 Antibody) at a dilution of 1/35.



In comparison with the IHC on the left, the same paraffin-embedded Human brain tissue is first treated with synthetic peptide and then with D262429(Anti-TTBK1 Antibody) at dilution 1/35.