

Product datasheet for **TA351870S**

TTBK1 Rabbit Polyclonal Antibody

Product data:

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| Product Type: | Primary Antibodies |
| Applications: | IHC |
| Recommended Dilution: | IHC: 25-100 Positive control: Human breast cancer Predicted cell location: Cytoplasm |
| Reactivity: | Human |
| Host: | Rabbit |
| Isotype: | IgG |
| Clonality: | Polyclonal |
| Immunogen: | Synthetic peptide of human TTBK1 |
| Formulation: | pH7.4 PBS, 0.05% NaN ₃ , 40% Glycerol |
| Purification: | Antigen affinity purification |
| 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 84630 Human Q5TCY1 |

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.

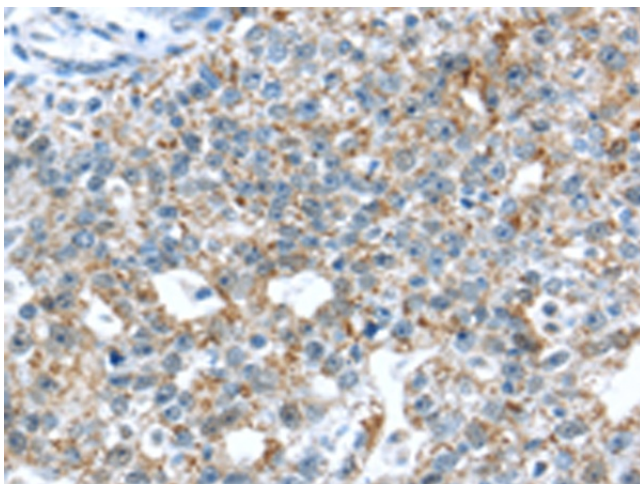


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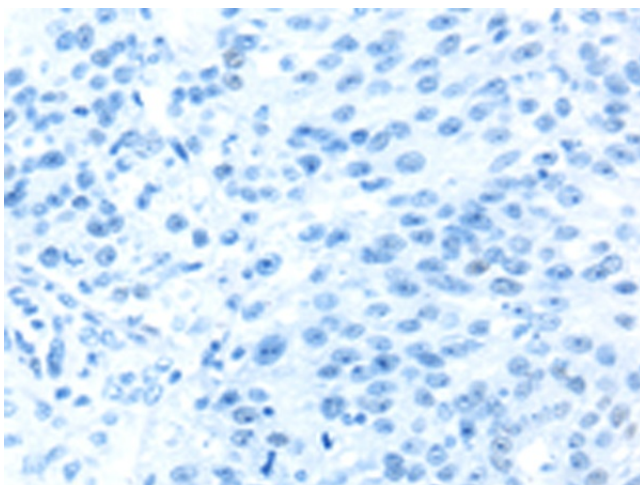
Synonyms: BDTK

Protein Families: Druggable Genome, Protein Kinase

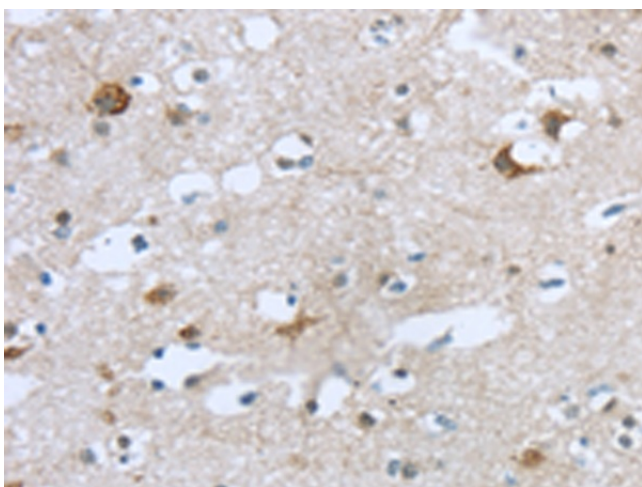
Product images:



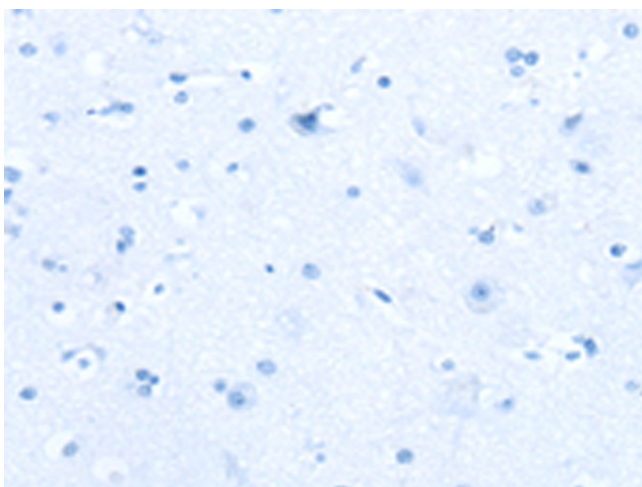
Immunohistochemistry of paraffin-embedded Human breast cancer tissue using [TA351870] (TTBK1 Antibody) at dilution 1/35 (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human breast cancer tissue using [TA351870] (TTBK1 Antibody) at dilution 1/35, treated with synthetic peptide. (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human brain tissue using [TA351870] (TTBK1 Antibody) at dilution 1/35 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human brain tissue using [TA351870] (TTBK1 Antibody) at dilution 1/35, treated with synthetic peptide. (Original magnification: ×200)