

# TTBK1 Conjugated Antibody

Catalog No: #C43428

Package Size: #C43428-AF350 100ul #C43428-AF405 100ul #C43428-AF488 100ul  
 #C43428-AF555 100ul #C43428-AF594 100ul #C43428-AF647 100ul  
 #C43428-AF680 100ul #C43428-AF750 100ul #C43428-Biotin 100ul

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## Description

Product Name	TTBK1 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total TTBK1 protein.
Immunogen Description	Synthetic peptide of human TTBK1
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	BDTK
Accession No.	Swiss-Prot#:Q5TCY1 NCBI Gene ID:84630NCBI mRNA#:NP_115927
Uniprot	Q5TCY1
GeneID	84630;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

### Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## Background

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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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Note: This product is for in vitro research use only