

Product datasheet for RC214874

TTBK1 (NM_032538) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TTBK1 (NM_032538) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TTBK1
Synonyms:	BDTK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214874 representing NM_032538 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC

ATGCAGTGCCTAGCGGCCCCCTTAAGGACGAAACCAACATGAGTGGGGAGGGGAGCAGGCCGACATCC
TGCCGGCCAACTACGTGGTCAAGGATCGCTGGAAGGTGCTGAAAAAGATCGGGGGCGGGGCTTTGGTGA
GATCTACGAGGCCATGGACCTGCTGACCAGGGAGAATGTGGCCCTCAAGGTGGAGTCAGCCAGCAGCCC
AAGCAGGTCTCAAGATGGAGTGGCCGTCTCAAGAAGTTGCAAGGGAAGGACCATGTGTGCAGGTTCA
TTGGCTGTGGCAGGAACGAGAAGTTAACTATGTAGTGTGCAGCTCCAGGGCCGGAACCTGGCCGACCT
GCGCCGTAGCCAGCCGCGAGGCACCTTCACGCTGAGCACCACATTGCGGCTGGGCAAGCAGATCTTGGAG
TCCATCGAGGCCATCCACTCTGTGGGCTTCTGCACCGTGACATCAAGCCTTCAAACCTTTGCCATGGGCA
GGCTGCCCTCCACCTACAGGAAGTGCTATATGCTGGACTTCGGGCTGGCCCGGCAGTACACCAACACCAC
GGGGATGTGCGGCCCTCGGAATGTGGCCGGGTTTCGAGGAACGGTTCGCTATGCCTCAGTCAATGCC
CACAAGAACCAGGAGATGGGCCGCCACGACGACCTGTGGTCCCTCTTCTACATGCTGGTGGAGTTTGAG
TGGCCAGCTGCCCTGGAGGAAGATCAAGGACAAGGAACAGGTAGGGATGATCAAGGAGAAGTATGAGCA
CCGGATGCTGTAAGCACATGCCGTGAGATTCACCTCTTCTGGACCACATTGCCAGCCTCGACTAC
TTCACCAAGCCCGACTACCAAGTTCATGTCAGTGTGGAGAACAGCATGAAGGAGAGGGGCATTGCCG
AGAATGAGGCCTTTGACTGGGAGAAGGCAGGCACCGATGCCCTCCTGTCCACGAGCACCTTACCCCGCC
CCAGCAGAACACCCGGCAGACGGCAGCCATGTTTGGGGTGGTCAATGTGACGCCAGTGCCTGGGGACCTG
CTCCGGGAGAACCAGGATGTGCTACAGGGAGACCTGAGTGACCAGGAGAATGCACCCCAATTC
TGCCCGGAGGCCCTCTGAGGGGCTGGGCCAGTCCCCACCTTGTCCCCACCCGGGGTCTGAGGC
TGAAGTCTGGGAGGAGACAGATGTCAACCGGAACAACTCCGGATCAACATCGGCAAAAGCCCTGTGTG
GAGGAGGAACAGAGCCGAGGATGGGGTCCCCAGTCCCCAGTGCCTGCCCCCAGACTCCCCACAA
CCCCAGTCCGTTCTCTGCGCTACCGAGGGTGAACAGCCCTGAGTCAGAAAGGCTGTCCACGGCGGACGG
GCGAGTGGAGTACCTGAGAGGAGTACGGATGGATCTGCCTGGCTCGCCCTCGGCCAGGCTGCTCC



[View online »](#)

TCTCAGCCAGCCCAGATGCTGTCTAGTGGACACAGGCCACGCTGACCGACAGGCCAGTGGCCGCATGGACG
 TGTGAGCCTCTGTGGAGCAGGAGGCCCTGAGCAACGCCTTCCGCTCGGTGCCGCTGGCTGAGGAGGAGGA
 TTTTCGACAGCAAAGAGTGGGTATCATCGACAAGGAGACGGAGCTCAAGGACTTCCCTCCAGGGGCTGAG
 CCCAGCACATCGGGCACCACGGATGAGGAGCCCCGAGGAGCTGCGGCCACTGCCCGAGGAGGGCGAAGAGC
 GGGCGCGCTGGGGCAGAGCCCACCGTCCGGCCCCGGGACGCAGCATGCAGGCGCTGGCGGAGGAGGA
 CCTGCAGCATTTGCCGCCAGCCCTGCCACCCAGCTGAGCCAGGGCGATGGCCGTTCCGAGACGTCA
 CAGCCCCCACAGGCCACAGAGACAGGTGTTCTCCGTGGCGCCCCATTTGAGGTGAATGGCTCCACG
 CGGACCCACAGGCCACAGAGACAGGTGTTCTCCGTGGCGCCCCATTTGAGGTGAATGGCTCCACG
 AGCTGTGCTCTGAGTCTGCCCTACCAGGACTTCAAAGAGACCTCTCCGATTACCAGAGAACGGGCGCG
 TTGCTCAACAGGGTCCGGAGGGTGGGCTTCTCGCACATGCTGCTCACCACCCCCAGGTCCCACTGGCTC
 CTGTTGAGCCTCAGGCTAATGGGAAGGAGGAAGAGGAGGAGGAGGAAGATGAGGAAGAGGAAGAAGA
 GGATGAGGAAGAAGAAGAGGAGGAAGAGGAAGAGGAGGAGGAAGAAGAGGAGGAGGAGGAAGAGGAGGAG
 GAGGCTGCAGCGCAGTTGCCTTGGGGAGGTGCTGGGGCCTCGTAGTGGCTCCAGCAGTGGGGAGTG
 AGAGGAGCACTGACCGGAGCCAGGAGGGTGCCCCGTCCACGCTGCTGGCAGACGATCAGAAGGAGTCCAG
 GGGCCGGGCTCCATGGCCGATGGGGACCTGGAGCCTGAGGAGGGCTCCAAAACGCTGGTGTCTGTCTCT
 CCTGGCGACATGAAGAAGTCGCCGCTCACTGCCAACTGGCCCCGACCCGACCTGGGACCCCTGGCTG
 CCCTCACTCCTCAGCATGAGCGGCCACGCCACGGGCAGCCAGCTGGACGTATCTGAGCCAGGCCACCT
 GTCCTCTGTCTCAAGTCTGAGCCAAAGCCCCGGGGCTGGGGCAGGGCTGGGGCCGGGACAGTGACC
 ACAGGGGTCCGGGGCGTGGCAGTCACTCCTCACCCCTTACCAAAGTTGAGAGGACCTTTGTGCACATTG
 CGGAGAAAACCCACCTCAACGTATGTCTTCCGGTGGACAAGCCTTCCGGTCTGAGGAGTTACAGCGCTGG
 GGGCGAGCTGGTCTGGAGCTGGCCTGATGGGGCGCTGTGGAGGAGGGGGCCGAGCGCCCCGAGGAG
 AACGGCTCGCCCTGTCAGGGCTGAATGGGGCTGAGATAGAGGGCTCTGCCCTGTCTGGGGCCCCCGGG
 AAACCCCTCAGAGATGGCCACAACTCACTGCCAATGGCCCCGCCCCCTGCAGACGGGCCAGCCCCGCT
 GTCCCCGCTGGAGCCAAGCCCTGAGAAAGTGCCACCATCTCCCCAGACGCCATGCTATGCCAGGCTCT
 CGCCCCAGGAGCCGATCCCTGTCTGCTCTGAGGAGGACACGGGCTCGGAGCCCTCAGGCTCACTGT
 CGGCCAAAGAGCGGTGGAGCAAGCGGGCTCGGCCGACAGGACCTGGCGCGGCTGGTATGGAGAAGAG
 GCAGGGCCGCTGCTGTTGCGGCTGGCCTCAGGGGCTCGTCTCCTCCAGTGGAGGAGCAGCGCCGTGCC
 TCTGAGACCTCTCAGGCACGGGCTCTGAGGAGGACACGCCCGCCTCTGAGCCGGCAGCGGCTTGGCCA
 GGAAGAGCGGGAGGGCAGCCGCCACCAGGAGCCGATTCCCCGCCCATTTGGCTCCGCATGCCATGCC
 TGTTGACAGCCAGCAGCCGCCAGCAGATCCCATGGCGCGCCCCAGCATTGGACACAGCCATCACCAGC
 AGGCTCCAGCTGCAGACGCCCCAGGGTCGGCCACTGCTGCTGACCTCCGCCCAAACAACCTCCTGGCC
 GCGGCCTGGGCCAGGGCGAGCCCAAGCCGGAGCCAGGCCCCAGCGCCGCGCAGCCCGGCTCCCGGC
 GTCCACATCCGCGCGGCAATGCCAGCGCTCCCCCGGAGCCAGTCCCTGTCCCGCAGAGAGAGCCCC
 TCCCCCTCGCACCAGGCCGGCCGGGGTCCCCCGCCCCGGGGCGTCCCGCCGGCCGGGGCCAGCCTG
 ATGGCACCCCTCCCCGGGGCTCCAAGAAAGGACCCAGAGGAAACTCCAGGCTCAGCGCGCAACAAC
 CAAAGGCCGGCAGGAGGCGGGAGGGCCGGGCTGGGGCCAGA

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214874 representing NM_032538
 Red=Cloning site Green=Tags(s)

MQCLAALKDETNMSGGGEQADILPANYVVKDRWVLLKIGGGGFGEIYEAMDLLTRENVALKVESAQQP
 KQVLKMEVAVLKKLQGDHVCRFIGCGRNEKFNYYVMQLQGRNLADLRRSQPRGFTLSTTLRLGKQILE
 SIEAIHSVGLHRDIKPSNFAMGRLPSTYRKCYMLDFGLARQYNTTGDVRRPRNVAGFRGTVRYASVNA
 HKNREMGRHDDLWSLFYMLVEFVAVGQLPWRKIKDKEQVGMIEKEYEHRMLLKHPSEFHLFDHIASLDY
 FTKPDYQLIMSVFENSMMKERGIAENAFDWEKAGTDALLSTSTSTPPQQNTRQTAAMFGVNVVTPVPGDL
 LRENTEDVLQGEHLSDQENAPPILPGRPSEGLGSPHLPVHPGGPEAEVWEE TDVNRNKLKRINIGKSPCV
 EEEQSRMGVPPSPVRAPPDSPTTPVRSRLRYRRVNSPESERLSTADGRVELPERRSRMDLPGSPSRQACS
 SQPAQMLSVDTGHADRQASGRMDVSASVEQEALSNAFRSVPLAEEDFDSKEWVIIDKETELKDFPPGAE
 PSTSGTDEEPEELRPLPEEGEERRRLGAEPTVRPRGRSMQALAEEDLQHLPPQPLPPQLSQGDGRSETS
 QPPTPGSPSHSPLHSGPRRRRESPTGPQRQVFSVAPPFEVNGLPRAVPLSLPYQDFKRDLSYRERAR
 LLNRVRRVGF SHMLL TTPQVPLAPVQPQANGKEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE
 EAAAAVALGEVLGPRSGSSSEGSESTDRSQEGAPSTLLADDQKESRGRASMADGDLEPEEGSKTLVLS
 PGDMKKSPTAELAPDPLGTLAALTPQHERPQPTGSQLDVSEPGTSSVLKSEPKPPGAGLGGAGTGT
 TGVGGVAVTSSPFTKVERTFVHIAEKTHLNVMSGGQALRSEEF SAGGELGLELASDGGAVEEGARAPLE
 NGLALSGLNGAEIEGALS GAPRETPSEMATNSLPNGPALADGPAPVSPLEPSPEKVATISPRRHAMPGS
 RPRSRIPLVLLSEEDTGSEPSGSL SAKERWSKRARPQDLARLVMEKRQGRLLRLASGASSSSSEEQRRR
 SETLSGTGSEEDTPASEPAAALPRKSGRAAATRSRIPRPIGLRMPMPVAAQPPASRSHGAAPALDITAITS
 RLQLQTPPGSATAADLRPKQPPGRGLGPRAQAGARPPAPRSRPLPASTSAARNASAPRSQSLSRRESP
 SPSHQARPGVPPPRGVPPARAQPDGTPSPGGSKKGRGKLAQQRATTKGRAGGAEGRAGAR

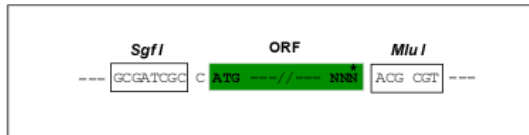
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



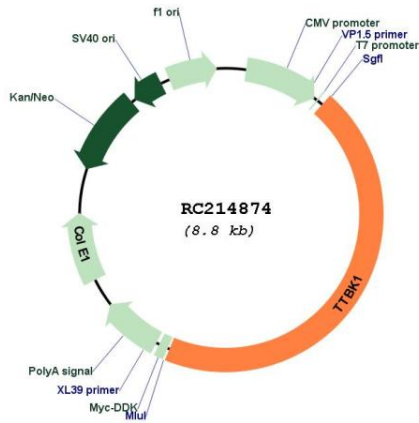
* The last codon before the Stop codon of the ORF

ACCN: NM_032538

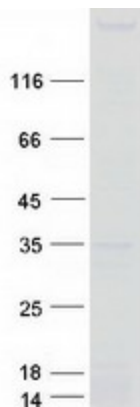
ORF Size: 3963 bp

OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_032538.3
RefSeq Size:	7128 bp
RefSeq ORF:	3966 bp
Locus ID:	84630
UniProt ID:	Q5TCY1
Cytogenetics:	6p21.1
Protein Families:	Druggable Genome, Protein Kinase
MW:	143.2 kDa
Gene Summary:	Summary: This gene belongs to the casein kinase 1 superfamily. The encoded protein is a neuron-specific, serine/threonine and tyrosine kinase, which regulates phosphorylation of tau, a protein that associates with microtubule assemblies and stabilizes them. Genetic variants in this gene are associated with Alzheimer's disease. [provided by RefSeq, Jul 2016]

Product images:



Circular map for RC214874



Coomassie blue staining of purified TTBK1 protein (Cat# [TP314874]). The protein was produced from HEK293T cells transfected with TTBK1 cDNA clone (Cat# RC214874) using MegaTran 2.0 (Cat# [TT210002]).