

Product datasheet for **RC225648**

Tau (MAPT) (NM_001123067) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tau (MAPT) (NM_001123067) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tau
Synonyms:	DDPAC; FTDP-17; MAPTL; MSTD; MTBT1; MTBT2; PPND; PPP1R103; TAU; tau-40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC225648 representing NM_001123067 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGAGCCCCGCCAGGAGTTCGAAGTATGGAAGATCACGCTGGGACGTACGGGTTGGGGACAGGA
AAGATCAGGGGGCTACACCATGCACCAAGACCAAGAGGGTGACACGGACGCTGGCCTGAAAGAATCTCC
CCTGCAGACCCCCACTGAGGACGGATCTGAGGAACCGGGCTCTGAAACCTCTGATGCTAAGAGCACTCCA
ACAGCGGAAGCTGAAGAAGCAGGATTGGAGACACCCCAAGCCTGGAAGACGAAGCTGCTGGTCACTGA
CCCAAGCTCGCATGGTCAAGTAAAAGCAAAGACGGGACTGGAAGCGATGACAAAAAGCCAAGGGGGCTGA
TGGTAAAACGAAGATCGCCACACCGGGGAGCAGCCCTCCAGGCCAGAAGGGCCAGGCCAACGCCACC
AGGATTCAGAAAAACCCCGCCGCTCCAAGACACCCAGCTCTGGTGAACCTCCAAAATCAGGGG
ATCGCAGCGGCTACAGCAGCCCCGGCTCCCCAGGCACTCCCGCAGCCGCTCCCGCACCCCGTCCCTTCC
AACCCACCCACCCGGGAGCCCAAGAAGGTGGCAGTGGTCCGTAATCCACCAAGTCGCCGCTTCCCGCC
AAGAGCCGCTGCAGACAGCCCCGTGCCATGCCAGACCTGAAGAATGTCAAGTCCAAGATCGGCTCCA
CTGAGAACCTGAAGCACCAGCCGGGAGGCGGAAGGTGCAGATAATTAATAAGAAGCTGGATCTTAGCAA
CGTCCAGTCCAAGTGTGGCTCAAAGGATAATATCAAACACGTCCCGGGAGGCGGAGTGTGCAAAATAGTC
TACAAACCAGTTGACCTGAGCAAGGTGACCTCCAAGTGTGGCTCATTAGGCAACATCCATCATAAACCAG
GAGGTGGCCAGGTGGAAGTAAAATCTGAGAAGCTTGACTTCAAGGACAGAGTCCAGTCAAAGATTGGGTC
CCTGGACAATATCACCCAGTCCCTGGCGGAGGAAATAAAAAGATTGAAACCCACAGCTGACCTCCCGC
GAGAACGCCAAAGCCAAGACAGACCACGGGGCGGAGATCGTGTACAAGTCGCCAGTGGTGTCTGGGGACA
CGTCTCCAGGCATCTCAGCAATGTCTCTCCACCGGCAGCATCGACATGGTAGACTCGCCCCAGCTCGC
CACGCTAGCTGACGAGGTGTCTGCCTCCCTGGCCAAGCAGGGTTTG

ACGGTACGGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC225648 representing NM_001123067
Red=Cloning site Green=Tags(s)

MAEPRQEFVEMDHAGTYGLGDRKDQGGYTMHQDQEGDTDAGLKESPLQPTPTEDGSEEPGSETSDAKSTP
 TAEAEAGIGDTPSLEDEAAGHVTQARMVSKSKDGTGSDDKAKAGADGKTKIATPRGAAPPQKQANAT
 RIPAKTPPAPKTPSSGEPKSGDRSGYSSPGSPGTPGSRRTPSLPTPTREPKKVAVVRTPPKSPSSA
 KSRLQTAPVMPDLKNVKSKIGSTENLKHQPGGGKQVI INKKLDLSNVQSKCGSKDNIKHVPGGGSVQIV
 YKPVDLKSVTSKCGSLGNIHHKPGGGQVEYKSEKLDKDRVQSKIGSLDNI THVPGGGNKKIETHKLTFR
 ENAKAKTDHGAEIVYKSPVVGDTSPRHLSNVSSSTGSIDMVDSPQLATLADEVASLAKQGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3492_f06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001123067

ORF Size: 1236 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:

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_001123067.3](#)

RefSeq ORF: 1239 bp

Locus ID: 4137

UniProt ID: [P10636](#)

Cytogenetics: 17q21.31

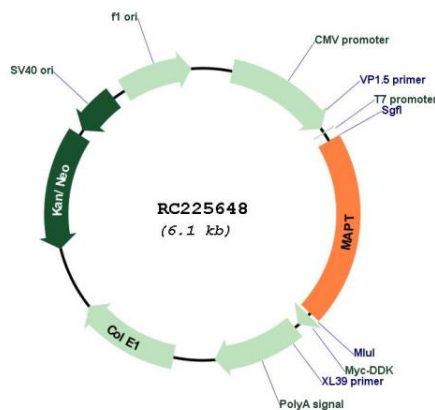
Protein Families: Druggable Genome

Protein Pathways: Alzheimer's disease, MAPK signaling pathway

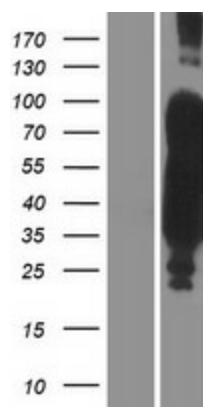
MW: 42.8 kDa

Gene Summary: This gene encodes the microtubule-associated protein tau (MAPT) whose transcript undergoes complex, regulated alternative splicing, giving rise to several mRNA species. MAPT transcripts are differentially expressed in the nervous system, depending on stage of neuronal maturation and neuron type. MAPT gene mutations have been associated with several neurodegenerative disorders such as Alzheimer's disease, Pick's disease, frontotemporal dementia, cortico-basal degeneration and progressive supranuclear palsy. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC225648



Western blot validation of overexpression lysate (Cat# [LY426599]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225648 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).