

## Product datasheet for **RG213364**

### Tau (MAPT) (NM\_016841) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tau (MAPT) (NM_016841) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tau
Synonyms:	DDPAC; FTDP-17; MAPTL; MSTD; MTBT1; MTBT2; PPND; PPP1R103; TAU; tau-40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213364 representing NM_016841 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTGAGCCCCGCCAGGAGTTCGAAGTATGGAAGATCACGCTGGGACGTACGGGTTGGGGACAGGA  
AAGATCAGGGGGCTACACCATGCACCAAGACCAAGAGGGTGACACGGACGCTGGCCTGAAAGCTGAAGA  
AGCAGGCATTGGAGACACCCCCAGCCTGGAAGACGAAGCTGCTGGTCACGTGACCCAAGCTCGCATGGTC  
AGTAAAAGCAAAGACGGGACTGGAAGCGATGACAAAAAGCCAAGGGGGCTGATGGTAAAACGAAGATCG  
CCACACCGCGGGGAGCAGCCCCCAGGCCAGAAAGGGCCAGGCCAACGCCACCAGGATTCAGCAAAAAC  
CCGCCCCGCTCCAAAGACACCACCCAGCTCTGGTGAACCTCCAAAATCAGGGGATCGCAGCGGCTACAGC  
AGCCCCGGCTCCCCAGGCACTCCCGGCAGCCGCTCCCGCACCCCGTCCCTTCCAACCCACCCACCCGGG  
AGCCCAAGAAGGTGGCAGTGGTCCGTACTCCACCCAAGTCGCCGCTCTCCGCCAAGAGCCGCTGCAGAC  
AGCCCCCGTGCCCATGCCAGACCTGAAGAATGTCAAGTCCAAGATCGGCTCCACTGAGAACCTGAAGCAC  
CAGCCGGGAGGCGGAAGGTGCAATAGTCTACAAACAGTTGACCTGAGCAAGGTGACCTCCAAGTGTG  
GCTCATTAGGCAACATCCATCATAAACCAGGAGGTGGCCAGGTGGAAGTAAAATCTGAGAAGCTTGACTT  
CAAGGACAGAGTCCAGTGAAGATTGGGTCCCTGGACAATACCCACGTCCCTGGCGGAGGAAATAAA  
AAGATTGAAACCCACAAGCTGACCTCCGCGAGAACGCCAAAGCCAAGACAGACACGGGGCGGAGATCG  
TGTACAAGTCGCCAGTGGTGTCTGGGGACACGTCTCCACGCATCTCAGCAATGTCTCCTCCACCGGCGAG  
CATCGACATGGTAGACTCGCCCCAGCTCGCCACGCTAGCTGACGAGGTGTCTGCCTCCCTGGCCAAGCAG  
GGTTTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG213364 representing NM\_016841  
 Red=Cloning site Green=Tags(s)

MAEPRQFEFVMEHDAGTYGLGDRKDQGGYTMHQDQEGDTDAGLKAEAEAGIGDTPSLEDEAAGHVTQARMV  
 SKSKDGTGSDDKKAKGADGKTKIATPRGAAPPQKQGANATRIPAKTPPAPKTPPSSGEPKSGDRSGYS  
 SPGSPGTPGSRSRTPSLPTPPTREPKKVAVVRTPPKSPSSAKSRLQTAPVMPDLKNVSKIGSTENLKH  
 QPGGGKVQIVYKPVDLKSVTSKCGSLGNIHHKPGGGQVEVKSEKLDKDRVQSKIIGSLDNI THVPGGGNK  
 KIETHKLTFRENAKAKTDHGAEIVYKSPVVS GDTSPRHL SNVSS TGSIDMVDSPQLATLADEVASASLAKQ  
 GL

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_016841

**ORF Size:** 1056 bp

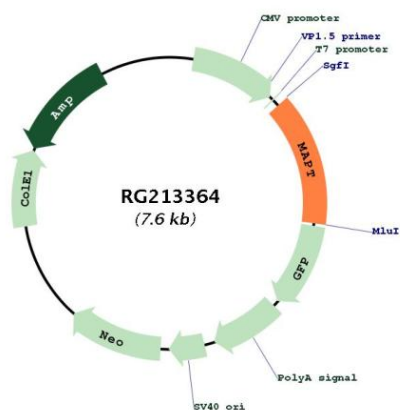
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_016841.5</a>
<b>RefSeq Size:</b>	2529 bp
<b>RefSeq ORF:</b>	1059 bp
<b>Locus ID:</b>	4137
<b>UniProt ID:</b>	<a href="#">P10636</a>
<b>Cytogenetics:</b>	17q21.31
<b>Domains:</b>	tubulin-binding
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Alzheimer's disease, MAPK signaling pathway
<b>Gene Summary:</b>	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 RG213364