

Product datasheet for **RG226159**

Tau (MAPT) (NM_001123066) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tau (MAPT) (NM_001123066) 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)



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ORF Nucleotide Sequence:

>RG226159 representing NM_001123066
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGAGCCCCGCCAGGAGTTGGAAGTATGGAAGATCACGCTGGGACGTACGGTTGGGGACAGGA
 AAGATCAGGGGGCTACACCATGCACCAAGACCAAGAGGGTGACACGGACGCTGGCTGAAAAGAACTCC
 CCTGCAGACCCCCACTGAGGACGGATCTGAGGAACCGGGCTCTGAAACCTCTGATGCTAAGAGCACTCCA
 ACAGCGGAAGATGTGACAGCACCTTAGTGGATGAGGGAGCTCCCGCAAGCAGGCTGCCGCGCAGCCCC
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 GGGCGGAGATCGTGTACAAGTCGCCAGTGGTGTCTGGGGACACGTCTCCACGGCATCTCAGCAATGTCTC
 CTCACCCGGCAGCATCGACATGGTAGACTCGCCCCAGCTCGCCACGCTAGCTGACGAGGTGTCTGCCTCC
 CTGGCCAAGCAGGTTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG226159 representing NM_001123066
 Red=Cloning site Green=Tags(s)

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MAEPRQFEFVMEHDAGTYGLGDRKDQGGYTMHQDQEGDTDAGLKESPLQTPTEGSEEPGSETSDAKSTP
TAEDVTAPLVDEGAPGKQAAAQPHTEIPEGTTAEEAGIGDTPSLEDEAAGHVTQEPESGKVVQEGFLREP
GPPGLSHQLMSGMPGAPLLPEGPREATRQPSGTGPEDETEGGRHAPELLKHQLLGDHLHQEGPPLKGAGGKE
RPGSKEEVEDRVDVDESSPQDSPPSKASPAQDGRPPQTAAREATSIPGFPAEGAIPLPVDFLSKVSTEIP
ASEPDGSPVGRAKGQDAPLEFTFHVEITPNVQKEQAHSEEHLGRAAFPAPGEGPEARGPSLGEDTKEAD
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DPLIQPSSPAVCPPEPSSPKHVSSVTSRTGSSGAKEMKLGADGKTKIATPRGAAPPQKQGANATRIPA
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VAVVRTPPKSPSSAKSRLQAPVMPDLKNVSKIGSTENLKHQPGGKQVQIINKKLDL SNVQSKCGSKD
NIKHPVGGGSVQIVYKVDLSKVTSKCGSLGNIHHKPGGGQVEVKSEKLDKDRVQSKIGSLDNITHVPG
GGNKKIETHKLTFRENAKAKTDHGAEIVYKSPVSGDTSRPHLSNVSSSTGSIDMVDPQLATLADEVAS
LAKQGL
  
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001123066

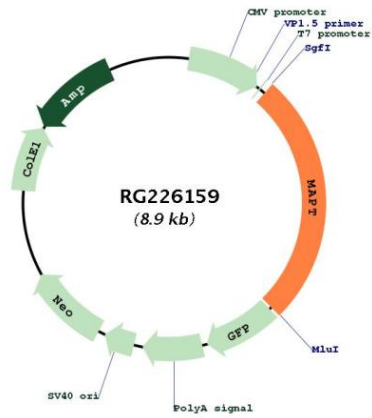
ORF Size: 2328 bp

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001123066.2</u> , <u>NP_001116538.1</u>
RefSeq Size:	6816 bp
RefSeq ORF:	2331 bp
Locus ID:	4137
UniProt ID:	<u>P10636</u>
Cytogenetics:	17q21.31
Protein Families:	Druggable Genome
Protein Pathways:	Alzheimer's disease, MAPK signaling pathway
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 RG226159