

Product datasheet for **RG213312**

Tau (MAPT) (NM_005910) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tau (MAPT) (NM_005910) 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:	>RG213312 representing NM_005910 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGAGCCCCGCCAGGAGTTCGAAGTATGGAAGATCACGCTGGGACGTACGGGTTGGGGACAGGA
AAGATCAGGGGGCTACACCATGCACCAAGACCAAGAGGGTGACACGGACGCTGGCCTGAAAGAATCTCC
CCTGCAGACCCCACTGAGGACGGATCTGAGGAACCGGGCTCTGAAACCTCTGATGCTAAGAGCACTCCA
ACAGCGGAAGATGTGACAGCACCTTAGTGGATGAGGGAGCTCCCGCAAGCAGGCTGCCCGCAGCCCC
ACACGGAGATCCCAGAAGGAACACAGTGAAGAAGCAGGCATTGGAGACACCCAGCCTGGAAGACGA
AGCTGCTGGTACGTCACCAAGCTCGCATGGTCAGTAAAAGCAAAGACGGGACTGGAAGCGATGACAAA
AAAGCCAAGGGGGCTGATGGTAAAACGAAGATCGCCACACCGCGGGGAGCAGCCCCCTCAGGCCAGAAGG
GCCAGGCCAACGCCACCAGGATTCAGCAAAAACCCCGCCGCTCCAAAGACACCACCCAGCTCTGGTGA
ACCTCCAAAATCAGGGGATCGCAGCGGCTACAGCAGCCCCGGCTCCCCAGGCACTCCCGGACGCCGCTCC
CGCACCCCGTCCCTTCCAACCCACCCACCCGGGAGCCCAAGAAGGTGGCAGTGGTCCGTAATCCACCCA
AGTCCGCGTCTTCCGCAAGAGCCGCTGCAGACAGCCCCGTCGCCATGCCAGACCTGAAGAATGTCAA
GTCCAAGATCGGCTCCACTGAGAACCTGAAGCACCAGCCGGGAGCGGGAAGGTGCAGATAATTAATAAG
AAGCTGGATCTTAGCAACGTCCAGTCCAAGTGTGGCTCAAAGGATAATATCAAACACGTCCTCCGGGAGCG
GCAGTGTGCAAAATAGTCTACAAACCAAGTTGACCTGAGCAAGGTGACCTCCAAGTGTGGCTCATTAGGCAA
CATCCATCATAAACCAGGAGGTGCCAGGTGGAAGTAAAATCTGAGAAGCTTGACTTCAAGGACAGAGTC
CAGTCGAAGATTGGTCCCTGGACAATATCACCCACGTCCTGGCGGAGGAAATAAAAGATTGAAACCC
ACAAGCTGACCTTCCGCGAGAACGCCAAAGCCAAGACAGACCACGGGCGGAGATCGTGTACAAGTCGCC
AGTGGTGTCTGGGGACAGTCTCCACGGCATCTCAGCAATGTCTCCTCCACCGGCAGCATCGACATGGTA
GACTCGCCCCAGCTCGCCACGCTAGCTGACGAGGTGTCTGCTCCCTGGCCAAGCAGGGTTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG213312 representing NM_005910
 Red=Cloning site Green=Tags(s)

MAEPRQEFVEMEDHAGTYGLGDRKDQGGYTMHQDQEGDTDAGLKESPLQPTEDGSEEPGSETSDAKSTP
 TAEDVTAPLVDEGAPGKQAAAQPHTEIPEGTTAEEAGIGDTPSLEDEAAGHVTQARMVSKSKDGTGSDDK
 KAKGADGKTKIATPRGAAPPQKQANATRIPAKTPPAPKTPPSSGEPKSGDRSGYSSPGSPGTPGSRS
 RTPSLPTPREPKKVAVVRTPPKSPSSAKSRLQTAPVMPDLKNVKSIGSTENLKHQPGGGKQVIINK
 KLDL.SNVQSKCGSKDNIKHVPGGGSVQIVYKPVDL.SKVT.SKCGSLGNIHHKPGGGQVEVKSEKLDKDRV
 QSKIGSLDNITHVPGGGNKKIETHKLT.FRENAKAKTDHGAEIVYKSPVSGDTSRHL.SNVSSTGSIDMV
 DSPQLATLADEVASLAKQGL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005910

ORF Size: 1323 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_005910.5](#)

RefSeq Size: 5731 bp

RefSeq ORF: 1326 bp

Locus ID: 4137

UniProt ID: [P10636](#)

Cytogenetics: 17q21.31

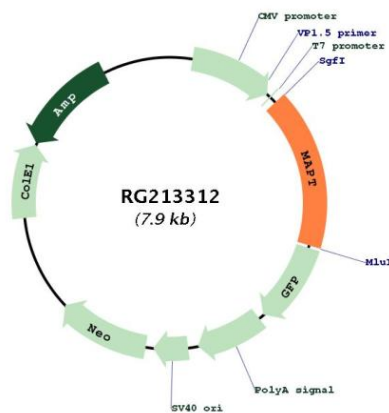
Domains: tubulin-binding

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 RG213312