

## Product datasheet for MR205738

### Mapt (NM\_010838) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mapt (NM_010838) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mapt
Synonyms:	AI413597; AW045860; Mtapt; Tau
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205738 representing NM_010838 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC

ATGGCTGACCCTCGCCAGGAGTTTGACACAATGGAAGACCATGCTGGAGATTACACTCTGCTCCAAGACC  
AAGAAGGAGACATGGACCATGGCTTAAAAGCCGAAGAAGCAGGCATCGGAGACACCCGAACCAGGAGGA  
CCAAGCCGCTGGGCATGTGACTCAAGCTCGTGTGGCCAGCAAAGACAGGACAGGAAATGACGAGAAGAAA  
GCCAAGGGCGCTGATGGCAAACCGGGGCAAGATCGCCACACCTCGGGGAGCAGCCTCTCCGGCCAGA  
AGGGCACGTCCAACGCCACCAGGATCCCGCCAAGACCACGCCACGCCCTAAGACTCCTCCAGGGTCAGG  
TGAACCACCAAAATCCGGAGAACGAAGCGGCTACAGCAGCCCGGCTCTCCCGGAACGCCTGGCAGTCGC  
TCGCGCACCCCATCCCTACCAACACCGCCACCCGGGAGCCCAAGAAGGTGGCAGTGGTCCGCACTCCCC  
CTAAGTCAACATCAGCTAGTAAGAGCCGCTGCAGACTGCCCTGTGCCATGCCAGACCTAAAGAATGT  
AGGGTCGAAGATTGGCTCTACTGAGAACCTGAAGCACCAGCCAGGAGGTGGCAAGGTGCAGATAATTAAT  
AAGAAGCTGGATCTTAGCAACGTCCAGTCCAAGTGTGGCTCGAAGGATAATATCAAACACGTCCCGGGTG  
GAGGCAGTGTGCAAAATAGTCTACAAGCCGGTGGACCTGAGCAAAGTGACCTCAAAGTGTGGCTCGTTAGG  
GAACATCCATCACAAGCCAGGAGGTGGCCAGGTGGAAGTAAAATCAGAGAAGCTGGACTTCAAGGACAGA  
GTCCAGTCGAAGATTGGCTCCTTGATAATATCACCCACGTCCCTGGAGGAGGAATAAGAAGATTGAAA  
CCACAAGCTGACCTTCAGGGAGAATGCCAAAGCCAAGACAGACCATGGAGCAGAAATTTGTGTATAAGTC  
ACCCGTGGTGTCTGGGGACATCTCCACGGCACCTCAGCAATGTGTCTTCCACGGGCAGCATCGACATG  
GTGGACTCACCACAGCTTCCACACTAGCCGATGAAGTGTCTGCTTCTTGGCCAAGCAGGGTTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >MR205738 representing NM\_010838  
 Red=Cloning site Green=Tags(s)

MADPRQEFDTMEDHAGDYTLQDQEGDMDHGLKAE EAGIGDTPNQEDQAAGHVTQARVASKDRTGNDEKK  
 AKGADGKTGAKIATPRGAASPAQKGTSNATRIPAKTTSPKTPPGSGEPPKSGERSGYSSPGSPGTPGSR  
 SRTPSLPTPPTREPKKVAVVRTPPKSPSASKSRLQTAPVMPDLKNVGSKIGSTENLKHQPGGGKVQIIN  
 KKLDL SNVQSKCGSKDNIKHVPGGGSVQIVYKPVDSLKVT SKCGSLGNIHHKPGGGQVEVKSEKLDKDR  
 VQSKIGSLDNITHVPGGNKKIETHKLT FRENAAKTDHGAEIVYKSPVVS GDTSPRHLSNVSSTGSIDM  
 VDSPQLATLADEV SASLAKQGL

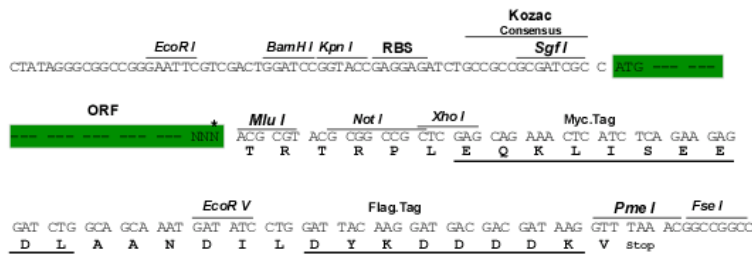
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_010838

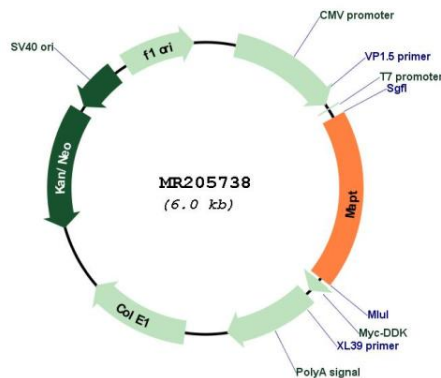
**ORF Size:** 1116 bp

**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>	<u><a href="#">NM_010838.2</a></u>
<b>RefSeq Size:</b>	5213 bp
<b>RefSeq ORF:</b>	1119 bp
<b>Locus ID:</b>	17762
<b>UniProt ID:</b>	<u><a href="#">P10637</a></u>
<b>Cytogenetics:</b>	11 E1
<b>MW:</b>	39.4 kDa
<b>Gene Summary:</b>	Promotes microtubule assembly and stability, and might be involved in the establishment and maintenance of neuronal polarity. The C-terminus binds axonal microtubules while the N-terminus binds neural plasma membrane components, suggesting that tau functions as a linker protein between both. Axonal polarity is predetermined by tau localization (in the neuronal cell) in the domain of the cell body defined by the centrosome. The short isoforms allow plasticity of the cytoskeleton whereas the longer isoforms may preferentially play a role in its stabilization.[UniProtKB/Swiss-Prot Function]

**Product images:**


Circular map for MR205738