

## Product datasheet for **MR229506**

### Mapt (NM\_001285454) Mouse Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
Product Name: Mapt (NM\_001285454) Mouse Tagged ORF Clone  
Tag: Myc-DDK  
Symbol: Mapt  
Synonyms: AI413597; AW045860; Mtapt; Tau  
Vector: pCMV6-Entry (PS100001)  
E. coli Selection: Kanamycin (25 ug/mL)  
Cell Selection: Neomycin  
ORF Nucleotide Sequence: >MR229506 representing NM\_001285454  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCTGACCCTCGCCAGGAGTTTGACACAATGGAAGACCATGCTGGAGATTAACTCTGCTCAAGACC  
AAGAAGGAGACATGGACCATGGCTTAAAAGCCGAAGAAGCAGGCATCGGAGACACCCGAACCAGGAGGA  
CCAAGCCGCTGGGCATGTGACTCAAGCTCGTGTGGCCAGCAAAGACAGGACAGGAAATGACGAGAAGAAA  
GCCAAGGGCGCTGATGGCAAACCGGGGCGAAGATCGCCACACCTCGGGGAGCAGCCTCTCCGGCCAGA  
AGGGCACGTCCAACGCCACCAGGATCCCGGCCAAGACCACGCCAGCCCTAAGACTCCTCCAGGGTCAGG  
TGAACCACCAAAATCCGGAGAACGAAGCGGCTACAGCAGCCCCGGCTCTCCCGGAACGCCTGGCAGTCGC  
TCGCGCACCCATCCCTACCAACACCGCCACCCGGGAGCCCAAGAAGGTGGCAGTGGTCCGCACTCCCC  
CTAAGTCACCATCAGCTAGTAAGAGCCGCTGCAGACTGCCCCGTGCCCCATGCCAGACCTAAAGAATGT  
CAGGTGCAAGATTGGCTCTACTGAGAACCTGAAGCACCAGCCAGGAGGTGGCAAGGTGCAATAGTCTAC  
AAGCCGGTGGACCTGAGCAAAGTGACCTCAAGTGTGGCTCGTTAGGGAACATCCATCACAAGCCAGGAG  
GTGGCCAGGTGGAAGTAAATCAGAGAAGCTGGACTTCAAGGACAGAGTCCAGTGAAGATTGGCTCCTT  
GGATAATATACCCACGTCCCTGGAGGAGGAATAAGAAGATTGAAACCCACAAGCTGACCTTCAGGGAG  
AATGCCAAAGCCAAGACAGACCATGGAGCAGAAATTGTGTATAAGTCACCCGTGGTGTCTGGGGACACAT  
CTCCACGGCACCTCAGCAATGTGTCTTCCACGGGCAGCATCGACATGGTGGACTCACCACAGCTTCCAC  
ACTAGCCGATGAAGTGTCTGCTTCTTGGCCAAGCAGGGAAAAGCTGCTTACTGAGTTCTCAAGTTTGG  
AACTACAGCCATGATTTGGCCACCATTACAGACCTGGGACTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR229506 representing NM\_001285454  
 Red=Cloning site Green=Tags(s)

MADPRQEFDTMEDHAGDYTLQLDQEGDMDHGLKAE EAGIGDTPNQEDQAAGHVTQARVASKDRTGNDEKK  
 AKGADGKTGAKIATPRGAASPAQKGTSNATRIPAKTTPSPKTPPGSGEPPKSGERSGYSSPGSPGTPGSR  
 SRTPSLPTPPTREPKKVAVVRTPPKSPSASKSRLQTAPVMPDLKNVRSKIGSTENLKHQPGGGKQIVY  
 KPVDLSKVTSKCGSLGNIHHKPGGGQVEVSEKLDKDRVQSKIGSLDNI THVPGGGNKKIETHKLTFR  
 NAKAKTDHGAEIVYKSPVSGDTSRHL SNVSS TGSIDMVDSPQLATLADEV SASLAKQGKAALLSSQVM  
 NYSHDLATITDLGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

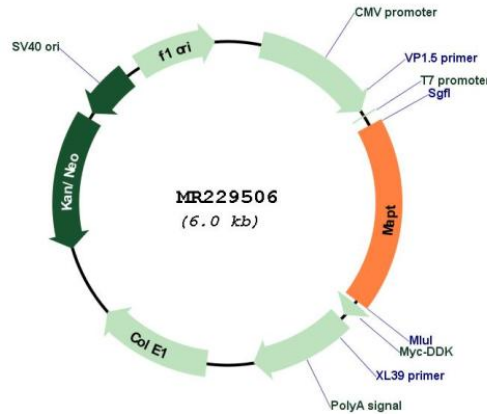
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001285454

<b>ORF Size:</b>	1092 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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_001285454.1</a> , <a href="#">NP_001272383.1</a>
<b>RefSeq Size:</b>	4207 bp
<b>RefSeq ORF:</b>	1095 bp
<b>Locus ID:</b>	17762
<b>UniProt ID:</b>	<a href="#">P10637</a>
<b>Cytogenetics:</b>	11 E1
<b>MW:</b>	38.6 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]