

## **Product datasheet for MC207330**

## Mapt (NM\_010838) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Mapt (NM\_010838) Mouse Untagged Clone

Tag: Tag Free Symbol: Mapt

Synonyms: Al413597; AW045860; Mtapt; Tau

Mammalian Cell Neomycin

Selection:

Vector:

pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC207330 representing NM\_010838

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCTGACCCTCGCCAGGAGTTTGACACAATGGAAGACCATGCTGGAGATTACACTCTGCTCCAAGACC AAGAAGGAGACATGGACCATGGCTTAAAAGCCGAAGAAGCAGGCATCGGAGACACCCCCGAACCAGGAGGA CCAAGCCGCTGGGCATGTGACTCAAGCTCGTGTGGCCAGCAAAGACAGGACAGGAAATGACGAGAAGAAA GCCAAGGGCGCTGATGGCAAAACCGGGGCGAAGATCGCCACACCTCGGGGAGCAGCCTCTCCGGCCCAGA AGGGCACGTCCAACGCCACCAGGATCCCGGCCAAGACCACGCCCTAAGACTCCTCCAGGGTCAGG TGAACCACCAAAATCCGGAGAACGAAGCGGCTACAGCAGCCCCGGCTCTCCCGGAACGCCTGGCAGTCGC TCGCGCACCCCATCCCTACCAACACCGCCCACCCGGGAGCCCAAGAAGGTGGCAGTGGTCCGCACTCCCC CTAAGTCACCATCAGCTAGTAAGAGCCGCCTGCAGACTGCCCCTGTGCCCATGCCAGACCTAAAGAATGT AAGAAGCTGGATCTTAGCAACGTCCAGTCCAAGTGTGGCTCGAAGGATAATATCAAACACGTCCCGGGTG GAGGCAGTGTGCAAATAGTCTACAAGCCGGTGGACCTGAGCAAAGTGACCTCCAAGTGTGGCTCGTTAGG GAACATCCATCACAAGCCAGGAGGTGGCCAGGTGGAAGTAAAATCAGAGAAGCTGGACTTCAAGGACAGA GTCCAGTCGAAGATTGGCTCCTTGGATAATATCACCCACGTCCCTGGAGGAGGGAATAAGAAGATTGAAA ACCCGTGGTGTCTGGGGACACATCTCCACGGCACCTCAGCAATGTGTCTTCCACGGGCAGCATCGACATG GTGGACTCACCACAGCTTGCCACACTAGCCGATGAAGTGTCTGCTTCCTTGGCCAAGCAGGGTTTGTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com ORIGENE

**ACCN:** NM\_010838

**Insert Size:** 1119 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 <a href="mailto:customercom">customercom</a> 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

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

**RefSeq:** <u>NM 010838.4</u>, <u>NP 034968.3</u>

 RefSeq Size:
 5222 bp

 RefSeq ORF:
 1119 bp

 Locus ID:
 17762

 UniProt ID:
 P10637

 Cytogenetics:
 11 E1



## **Gene Summary:**

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]

Transcript Variant: This variant (2) lacks two consecutive exons in the coding region, compared to variant 1. The resulting isoform (b) lacks an internal segment, compared to isoform a.