

Product datasheet for **MG226202**

Mapt (NM_001038609) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Mapt (NM_001038609) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Mapt
Synonyms: AI413597; AW045860; Mtapt; Tau
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG226202 representing NM_001038609
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGACCCTCGCCAGGAGTTTGACACAATGGAAGACCATGCTGGAGATTAACTCTGCTCCAAGACC
AAGAAGGAGACATGGACCATGGCTTAAAAGAGTCTCCCCACAGCCCCCGCGATGATGGAGCGGAGGA
ACCAGGGTCGGAGACCTCCGATGCTAAGAGCACTCCAAGTCTGAAGACGTGACTGCGCCCTAGTGGAT
GAGAGAGCTCCGACAAGCAGGCCGCTGCCAGCCCCACACGGAGATCCCAGAAGGAATTACAGCCGAAG
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CAGCAAAGACAGGACAGGAAATGACGAGAAGAAAGCCAAAGGGCGCTGATGGCAAAACCGGGCGAAGATC
GCCACACCTCGGGGAGCAGCCTCTCCGGCCAGAAAGGGCACGTCCAACGCCACCGAGATCCCAGGCAAGA
CCACGCCAGCCCTAAGACTCCTCCAGGGTCAGGTGAACCACCAAAATCCGGAGAACGAAGCGGCTACAG
CAGCCCCGGCTCTCCCGAACGCCTGGCAGTCGCTCGCGACCCCATCCCTACCAACACCGCCACCCCGG
GAGCCCAAGAAGGTGGCAGTGGTCCGACTCCCCCTAAGTCAACATCAGCTAGTAAGAGCCGCTGCAGA
CTGCCCTGTGCCATGCCAGACCTAAAGAATGTCAAGTCAAGATTGGCTCTACTGAGAACCTGAAGCA
CCAGCCAGGAGGTGGCAAGGTGCAGATAATTAATAAGAAGCTGGATCTTAGCAACGTCCAGTCCAAGTGT
GGCTCGAAGGATAATATCAAACACGTCCCGGGTGGAGGCAGTGTGCAAAATAGTCTACAAGCCGGTGGACC
TGAGCAAAGTGACCTCCAAGTGTGGCTCGTTAGGGAACATCCATCACAAAGCCAGGAGGTGGCCAGGTGGA
AGTAAAATCAGAGAAGCTGGACTTCAAGGACAGAGTCCAGTCAAGATTGGCTCCTTGATAATATCACC
CACGTCCCTGGAGGAGGAAATAAGAAGATTGAAACCCACAAGCTGACCTCAGGGAGAATGCCAAAGCCA
AGACAGACCATGGAGCAGAAATTGTGTATAAGTCAACCGTGGTGTCTGGGGACACATCTCCACGGCACCT
CAGCAATGTGCTTCCACGGGCAGCATCGACATGGTGGACTCACACAGCTTGCCACACTAGCCGATGAA
GTGTCTGCTTCTTGCCCAAGCAGGTTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG226202 representing NM_001038609
 Red=Cloning site Green=Tags(s)

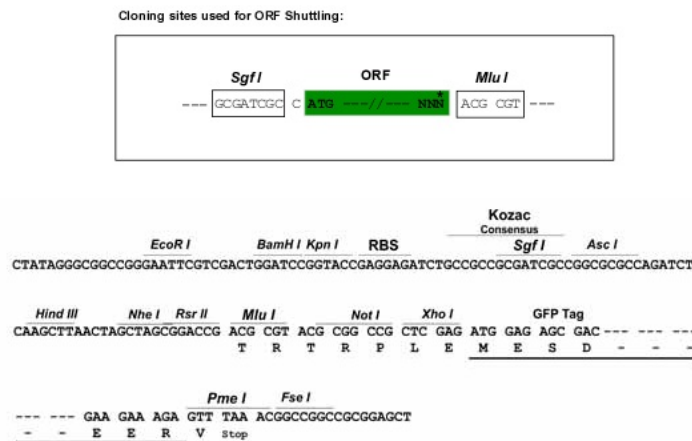
MADPRQEFDTMEDHAGDYTLQDQEGDMDHGLKESPPQPPADDGAEPEGSETSDAKSTPTAEDVTAPLVD
 ERAPDKQAAAQPHTIPEGITAEAEAGIGDTPNQEDQAAGHVTVARVASKDRTGNDEKKAKGADGKTGAKI
 ATPRGAASPAQKGTSNATRIPAKTTPSPKTPPGSGEPPKSGERSGYSSPGSPGTPGSRSRTPSLPTPSTR
 EPKKVAVVRTPPKSPSASKSRLQTAPVMPDLKNVRSKIGSTENLKHQPGGKQVQIINKKLDL SNVQSKC
 GSKDNIKHVPGGGSVQIVYKPVDL SKVTSKCGSLGNIHHKPGGGQVEVKSEKLDKDRVQSKIGSLDNIT
 HVPGGGNKKIETHKLTFRENAKAKTDHGAEIVYKSPVVS GDTSPRHL SNVSS TGSIDMVDSPLATLADE
 VSASLAKQGL

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1835_f07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001038609

ORF Size: 1290 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_001038609.2](#), [NP_001033698.1](#)

RefSeq Size: 5387 bp

RefSeq ORF: 1293 bp

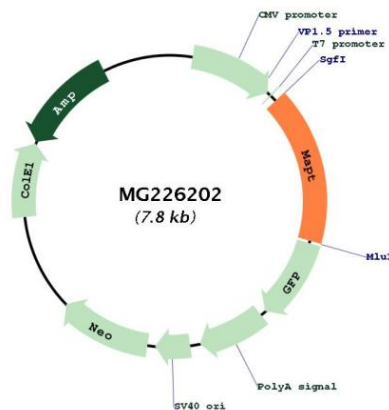
Locus ID: 17762

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]

Product images:



Circular map for MG226202