

## Product datasheet for **SC326343**

### MAP4 (NM\_001134364) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MAP4 (NM_001134364) Human Untagged Clone
Tag:	Tag Free
Symbol:	MAP4
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001134364, the custom clone sequence may differ by one or more nucleotides

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ATGGCTGACCTCAGTCTTGCAGATGCATTAACAGAACCATCTCCAGACATTGAGGGAGAG
ATAAAGCGGGACTTCATTGCCACACTAGAGGCAGAGGCCCTTTGATGATGTTGTGGGAGAA
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CCAACACTCCTAGCCAATGGTGGTCATGGAGTAGAAGGGAGCGATACTACAGGGTCTCCA
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GAAGATACCAACTTTTGTTCCTAACCTGAGCAAGTGGTCGATCCTATCCAGACTGATCCC
TTTAAGATGTACCATGATGATGACCTGGCAGATTGGTCTTCCCTCCAGTGCGACAGCT
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GAGCTAGCCAAGGAGATAGAAATGGCATCAGAAGAGAGGCCACCAGCACAAAGCATTGGAA
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GCCAAGGACATGGCACTAGCTACAAAAACCGAGGTGGCATTGGCTAAAGATATGGATCA
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ACCAAGGATAAAGCACTACCTTTAGAAGCAGAGGTGGCCCAAGTCAAGGACATGGCTCAA
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GGCTTGTGAAGGACATGTCTCCACTATCAGAAACAGAAATGGCTCTGGGCAAGGATGTG
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GAGGTGGCCCTGACTGAGGATCAGGTCCCAGCCCTCAAAAACAGAAGCACCCTGGCTAAG
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GAAACAGAGGCAACACCAGTTCCAATTAAGACATGGAATTCACAAAACACAAAAGGA
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TTCATGATTTACCAGAAACCGTCACAGGAACGGGGAAAAAGTGCAGCTTGCCGGCCGAG  
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 CTTTCTTCAGAGACCTCAGGAATAGCCAGGCCAGAAGAAGGAAGGCTGTGGTGAGTGGG  
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 TACAGCCATATTCAGTCCAAGTGTGGTTCCAAGGACAATATTAAGCATGTCCCTGGAGGT  
 GGTAATGTTTCAAGTTCAGATTGAGAACAGAAAGTGGACATCTCTAAGGTCTCCTCAAGTGTGGG  
 TCTAAGGCTAACATCAAGCACAAGCCTGGTGGAGGAGATGTCAAGATTGAAAGTCAGAAG  
 TTGAACCTCAAGGAGAAGGCCAGGCCAAGGTGGGATCCCTCGATAATGTGGGCCACCTA  
 CCTGCAGGAGGTGCTGTGAAGATTGAGACCTACAGGCTGACGTTCCGGGCAAATGCCAGG  
 GCCCGCACCGACCAGGGGCCGACATTGTCTCCCGCCCCCACACTTCCCTGGCGCCCC  
 AACTCGGGCTCCCGGTCTTGGCCCCCTTCCCGGGCTGTCCAC

- Restriction Sites:** Please inquire
- ACCN:** NM\_001134364
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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\\_001134364.1](#), [NP\\_001127836.1](#)

RefSeq Size: 6046 bp

RefSeq ORF: 3408 bp

Locus ID: 4134

UniProt ID: [P27816](#)

Cytogenetics: 3p21.31

**Gene Summary:** The protein encoded by this gene is a major non-neuronal microtubule-associated protein. This protein contains a domain similar to the microtubule-binding domains of neuronal microtubule-associated protein (MAP2) and microtubule-associated protein tau (MAPT/TAU). This protein promotes microtubule assembly, and has been shown to counteract destabilization of interphase microtubule catastrophe promotion. Cyclin B was found to interact with this protein, which targets cell division cycle 2 (CDC2) kinase to microtubules. The phosphorylation of this protein affects microtubule properties and cell cycle progression. Multiple transcript variants encoding different isoforms have been found for this gene.

[provided by RefSeq, Aug 2008]

Transcript Variant: This variant (4) lacks an alternate exon and uses an alternate splice site in the 3' coding region, compared to variant 1. The resulting protein (isoform 4) has a shorter and distinct C-terminus, compared to isoform 1.