

Product datasheet for **SC109401**

MAP4 (NM_002375) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAP4 (NM_002375) Human Untagged Clone
Tag:	Tag Free
Symbol:	MAP4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_002375, the custom clone sequence may differ by one or more nucleotides

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ATGGCTGACCTCAGTCTTGCAGATGCATTAACAGAACCATCTCCAGACATTGAGGGAGAGATAAAGCGGG
ACTTCATTGCCACACTAGAGGCAGAGGCCCTTTGATGATGTTGTGGGAGAACTGTTGGAAAAACAGACTA
TATTCCTCTCCTGGATGTTGATGAGAAAACCGGAACTCAGAGTCAAAGAAGAAACCGTGCTCAGAACT
AGCCAGATTGAAGATACTCCATCTTCTAAACCAACTCCTAGCCAATGGTGGTCATGGAGTAGAAGGGA
GCGATACTACAGGGTCTCCAACCTGAATTCCTTGAAGAGAAAATGGCTACCAGGAATACCCAAATAGCCA
GAACGGCCAGAAGATACCAACTTTTGTTCACCTGAGCAAGTGGTCGATCCTATCCAGACTGATCCCA
TTTTAAGATGTACCATGATGATGACTGGCAGATTTGGTCTTCCCTCCAGTGCACAGCTGATACTTCAA
TATTTGCAGGACAAAATGATCCCTTGAAGACAGTTACGGTATGTCTCCCTGCAACACAGCTGTTGTACC
TCAGGGTGGTCTGTGGAAGCCTTAAACTCTCCCACTCAGAGTCTTTGTTTCCCAGAGGCTGTTGCA
GAACCTCCTCAGCCAACGGCAGTTCCTTAGAGCTAGCCAAGGAGATAGAAATGGCATCAGAAGAGAGGC
CACCAGCACAGCATTGGAAATAATGATGGGACTGAAGACTACTGACATGGCACCATCTAAAGAAACAGA
GATGGCCCTCGCCAAGGACATGGCACTAGCTACAAAACCGAGGTGGCATTGGCTAAAGATATGGAATCA
CCCACAAATTAGATGTGACTGGCCAAGGACATGCAGCCATCCATGGAATCAGATATGGCCCTAGTCA
AGGACATGGAACACCCACAGAAAAGAAGTGGCCCTGGTTAAGGATGTCAGATGGCCACAGAAACAGA
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AAGAAAACAAGAAAGAAACAGAGAGGGCATCTCCTATAAAAAATGGACTTGGCTCCTTCCAAGGACATGGG
ACCACCAAGAAACAAGATAGTCCCAGCCAAGGATTTGGTATTACTCTCAGAAATAGAGGTGGCAGAG
GCTAATGACATTATATCATCCACAGAAATATCCTCTGCTGAGAAGGTGGCTTTGCTCCTCAGAAACAGAGG
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TTTAGAAGCAGAGGTGGCCCCAGTCAAGGACATGGCTCAACTCCAGAAACAGAAATAGCCCCGGCCAAG
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TCCAGAAATGGAGGTGGCCCTGACTGAGGATCAGGTCCCAGCCCTCAAAAACAGAAAGCACCCCTGGCTAAG
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CAACACCAGTTCCAATTAAGACATGGAAATTGCACAAACACAAAAAGGAATAAGTGAGGATTCCCATT
 AGAATCTCTGCAGGATGTGGGCAGTCACTGCACCTACTTTCATGATTTACCAGAAACCGTCACAGGA
 ACGGGGAAAAAGTGCAGCTTGCCGGCCGAGGAGGATTCTGTGTTAGAAAACTAGGGGAAAGGAAACCAT
 GCAACAGTCAACCTTCTGAGCTTCTTTCAGAGACCTCAGGAATAGCCAGGCCAGAAGAAGGAAGGCTGT
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 GGAGGAGATGTCAAGATTGAAAGTCAAGAAGTGAACCTCAAGGAGAAGGCCAGGCCAAGGTGGGATCCC
 TCGATAATGTGGCCACCTACCTGCAGGAGGTGCTGTGAAGACTGAGGGCGGTGGCAGCGAGGCTCCTCT
 GTGTCCGGTCCCCCTGCTGGGAGGAGCCGCCATCTCTGAGGCAGCCCTGAAGCTGGCGCCCCACT
 TCAGCCAGTGGCTCAATGGCCACCCACCTGTCAAGGGGTGGTGACCAAGGGAGGCCAGACCTTGG
 ACAGCCAGATCCAGGAGACAAGCATCTAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002375 unedited
 AGGATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCAGGAGGCCAGCTCC
 GTCTCGGGCGCGGGCAGTTGCAGTGGTGCAGAATGGCTGACCTCAGTCTTGAGATG
 CATTAAACAGAACCATCTCCAGACATTGAGGGAGAGATAAAGCGGACTTCATTGCCACAC
 TAGAGGCAGAGGCTTTGATGATGTTGTGGGAGAACTGTTGAAAAACAGACTATATTC
 CTCTCCTGGATGTTGATGAGAAAACCGGAACTCAGAGTCAAAGAAGAAACCGTCTCAG
 AAAGTAGCCAGATTGAAGATACTCCATCTTCTAAACCAACTCCTAGCCAATGGTGGT
 ATGGAGTAGAAGGGAGCGATACTACAGGGTCTCCAAGTGAATTCCTTGAAGAGAAAATGG
 CCTACCAGGAATACCAAATAGCCAGAACTGGCCAGAAGATACCAACTTTTGTTCAC
 CTGAGCAAGTGGTCGATCCTATCCAGACTGATCCCTTAAAGATGTACCATGATGATGACC
 TGGCAGATTTGGTCTTCCCTCCAGTGGCAGAGCTGATACTTCAATATTTGCAGGACANA
 ATGATCCCTTGAAGACAGTTACGGTATGTCTCCCTGCAACACAGCTGTTGTACCTCAGG
 NGTGGCCTGTGGAAGCCTTAACTCTNCACTCAGAGTCCCTTGTTCCTCCAGAGGGCTG
 TGCAGAACCTNCTCAGCCAACGGCAGTTCCTTAGAGCTANGCCAGGAGATAGAAATGCC
 ATCAGAAGAAGAGGCCACAGCANCAGCATTGGNNAATATGATGGGACTGAAGACTACTGA
 CATGGCACCATCTAAAGAAACAGAGATGCCCTCCGCCAGGACATGCACTACCTACAAAA
 CCGAGGTGGCATTGGCTCAAGATATGGATCCACCACCAATTAGATGTGACCTT

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_002375 unedited CTATGGACCGCGGCACGCTTCTATGATCGAGTTTTTTTTTTTTTTTTTTTTTTGGGGACATCAG GCAGCTTTATTTATTTACTCTTAAAACTGTTACAACAGAATCATGGACTGACACAGGTAA TGGCTGAGCCATAAGCAAATCGAGAAGTACAGAAATGTCCACCCCAAACAGCTGCGGAG TACACATCACACAGGGCCTCTGGTCCCGCCTTCTCAAGTGTCTGGAGTGGAGGATCCT TTGAGGGAACCTGACCCTCTGTTGTCTACCTAAAGAGCACGCCACTGGGCCACCTA CCCCAACCTTTGGCCAAAGGAGTGAAAGGACCTGGAACCTGTCGTCAACCTCAGCATCC TCATGACCCAGACAGACGAGTGGAGGCAGGACTACTGCGCCTGTGCTGTTGCC CTGAGGTGTCTCCTGACTACGCAACCCTGTTTCCTTCCCACTTTCATCCCAGCAGGCCCT TTCTTCTGCTGACAAAACACTGGCTCCCTCATGTTCTTGGCACAGCAGAAGTGTCTGC ACATGGTCTCTACGGAGGAAAGCTGGTCCCCTGGCCAGGCAGCACTTCTCCGTGAGC CCCTGCAGTTTCTGGTGTGTGCTTGGGGAGCTAGGGACATGGTGTCAAACCTTCACAAA GCACTGTACCTCAGATAGGGGGAGGACCTGTCAAGCCCAGGACAGCCTCCCTGCACATG GAGATCAAATCTAACTTAAGCAAGACCCTACCTTCTCCAGGGATGCCAGGACCANAGA ATGGCANAGGTGATGAAGGGGCATGGATGAGCCCAGTCTGGGGCACCCCTCTAAAAGGCA ATCTACACTGCAGCAATCCCCCTCACGAAAGCCCTTGGATCTCCAAGCCTTNCACATAAA ACTTAGTTGAATCCTTTTTAAAAACCTGCAACTAATACAAAAACAAGGCCAAAGAACC T
Restriction Sites:	NotI-NotI
ACCN:	NM_002375
Insert Size:	5850 bp
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).
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:	<ol style="list-style-type: none"> 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_002375.3 , NP_002366.2
RefSeq Size:	6337 bp
RefSeq ORF:	3459 bp
Locus ID:	4134
UniProt ID:	P27816
Cytogenetics:	3p21.31
Domains:	tubulin-binding

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 (1) represents the longest transcript. It encodes the longest isoform (1).