

Product datasheet for **SC109398**

MAP2 (NM_031845) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAP2 (NM_031845) Human Untagged Clone
Tag:	Tag Free
Symbol:	MAP2
Synonyms:	MAP-2; MAP2A; MAP2B; MAP2C
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC109398 sequence for NM_031845 edited (data generated by NextGen Sequencing)

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ATGGCAGATGAACGGAAGACGAAGCAAAGGCACCTCACTGGACCTCAGCACCGCTAACCA
GAGGCATCTGCACACTCACATCCACCTGAGATTAAGGATCAAGGCGGAGCAGGGGAAGGA
CTTGTCCGAAGCGCCAATGGATTCCCACAGGGAGGATGAAGAGGGTGCCTTTGGAGAG
CATGGGTACAGGGCACCTATTCAAATACCAAAGAGAATGGGATCAACGGAGAGCTGACC
TCAGCTGACAGAGAAACAGCAGAGGAGGTGTCTGCAAGGATAGTTCAAGTAGTCACTGCT
GAGGCTGTAGCAGTCTGAAAGGTGAACAAGAGAAAGAAGCTCAACATAAAGACCAGACT
GCAGCTCTGCCTTTAGCAGCTGAAGAAACAGCTAATCTGCCTCCTTCTCCACCCCATCA
CCTGCCTCAGAACAGACTGTACAGTGGAGGAAGCAGCAGGTGGGGAATCAGCTCTGGCT
CCCAGTGTATTTAAACAGGCAAAGGACAAAGTCTCTGACGGAGTAACCAAGAGCCAGAA
AAGCGCTCTTCTCCCAAGACCTTCTCCATTCTCCCTCTCGGCGAGGTGTGCAGGA
GACAGAGATGAGAATTCCTTCTCTCAACAGTTCTATCTTTCTCAGCACGGCGGACC
ACCAGGTGAGAGCAATTCGAGAGCAGGGAAGAGTGGTACCTCAACACCCACTACCCCT
GGGTCTACTGCCATCACTCCTGGCACCCACCAAGTTATTCTTACGCACACCAGGCACT
CCTGGAACCCCTAGCTATCCCAGGACCCCTCACACACCAGGAACCCCAAGTCTGCCATC
TTGGTGCCGAGTGAGAAGAAGGTCGCCATCATACTACTCCTCCAAAATCTCCTGCGACT
CCCAAGCAGCTTCGGCTTATTAACCAACCACTGCCAGACTGAAGAATGTCAAATCCAAA
ATCGGATCAACAGACAACATCAAATACCAGCCTAAAGGGGGCAGGTACAAATGTTTACC
AAGAAAATAGACCTAAGCCATGTGACATCCAAATGTGGCTCTCTGAAGAACATCCGCCAC
AGGCCAGGTGGCGGACGTGTGAAAATTGAGAGTGTAAACTAGATTTCAAAGAAAAGGCC
CAAGCTAAAGTTGGTTCTCTTGATAATGCTCATCATGTACCTGGAGGTGGTAATGTCAAG
ATTGACGCCAAAAGTTGAACTTCAGAGAGCATGCTAAAGCCCGTGTGGACCATGGGCT
GAGATCATTACACAGTCCCAGGAGATCCAGCGTGGCATCACCCCGACGACTCAGCAAT
GTCTCCTCGTCTGGAAGCATCAACCTGCTCGAATCTCCTCAGCTTGCCACTTTGGCTGAG
GATGCTACTGCTGCACTCGCTAAGCAGGCTTGTGA
    
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Clone variation with respect to NM_031845.2
21 t=>c

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_031845 unedited
GAGGCACGACACAACGAACCTTTATATTTTACCCTTCCTTGAATAGTTGCAGGAGAAATA
ACAAGGCATTGAAGAATGGCAGATGAACGGAAGACGAAGCAAAGGCACCTCACTGGACC
TCAGCACCGCTAACAGAGGCATCTGCACACTCACATCCACCTGAGATTAAGGATCAAGGC
GGAGCAGGGGAAGGACTTGTCCGAAGCGCCAATGGATTCCCACAGGGAGGATGAAGAG
GGTGCCTTTGGAGAGCATGGGTACAGGGCACCTATTCAAATACCAAAGAGAATGGGATC
AACGGAGAGCTGACCTCAGCTGACAGAGAAACAGCAGAGGAGGTGTCTGCAAGGATAGTT
CAAGTAGTCACTGCTGAGGCTGTAGCAGTCTGAAAGGTGAACAAGAGAAAGAAGCTCAA
CATAAAGACCAGACTGCAGCTCTGCCTTTAGCAGCTGAAGAAACAGCTAATCTGCCTCCT
TCTCCACCCCATCACCTGCCTCAGAACAGACTGTACAGTGGAGGAAGCAGCAGGTGGG
GAATCAGCTCTGGCTCCCAGTGTATTTAAACAGGCAAAGGACAAAGTCTCTGACGGAGTA
ACCAAGAGCCCAGAAAAGCGCTTCTCTCCCAAGACCTTCTCCATTCTCCCTCCTCGG
CGANGTGTGTGAGGACAGAGATGAGAATTCCTTCTCTCAACAGTTCTATCTTTCT
TTAGCACGGCGGACCACCAGGTGAGAGCAATTCGAGAGCAGGGAANAGNGGTACCTTA
ACACCCACTACCCCTGGGTTACTGGCATTACTTCTGGCACCCACAAGTTATT
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_031845 unedited CTATGTACCGCGCCGATTCTANATCGAGTTTTTTTTTTTTTTTTTTTGGCTAAAGTTGAAT TAGATTTTTATGATTGACATTTTATTTACTGAGTTTGAAAAAGCTTTTTCTGCTTAGA GTCTTGGCCTTACCTACACACCAAGCTAAAAATCCTAGGTGTAACAAAACTCAAACA TCAATGCTTATTTAGCACGTCAATCTTTGAAGGAATGCTTAAAAATTTCCTTACCCAGCC ATGAATCTACTTTATCTCTAGTATTTAGACCATGAGTAGTTTTATTTTCTTATTGTGGCT TGAAAAATAGAAGAAAACTGTAATTGCAGCTATGTCAAATCAACCACATTCAGGTTATT TCCTTAATAAAAACTGATGGAATGTTATATATTGGCTGATTATCCACGCTTGCTGAAT TACTGTAAGTGTGTGTGTGTGTGTGTGTGCGTGAGTGTGTGTGTGAGTTTACATAATCTCCC CCTAAATCCCCAGGGGAGGTTTAATTACCGCGGGGCTTTTTCCCTAATATTTCCCCC CCCAAAAAATTTTGGGGATGACCCCCCAGGGGGGAATCACTCTGGGGTTCTGTCA TCAAAAGCGGGGCTCCCCAAAGGGGAAGGGCGTAAACAGGTTTCACCTGTTAAGGAA CTCTAGTGGGGAGCTTTAATGGTCACTAGGGGAAGGGTTTAAATAAAAAATCTCTTT TCTTACCAATCCACTCCTTTTTTGGGCCATTGGGGAAAAACCCCGTAAAAATTTT CCCGGACTATTTCCGGGCCAAAAAATCTTAATAAGCCGAACCTGTAAAGGCTCCG GTACACGTAATTTTCTGTTAGAGATTATTGTCCCCCCTGTGGTTCCCCCTGGGAAC ATGGGGGCCCTGTTAAGGGGAACCCCGCCTTTTCAAGGCCCTTTGAAAAAATT TCC
Restriction Sites:	NotI-NotI
ACCN:	NM_031845
Insert Size:	4700 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:	<u>NM_031845.1</u> , <u>NP_114033.1</u>
RefSeq Size:	2466 bp
RefSeq ORF:	1416 bp
Locus ID:	4133
UniProt ID:	<u>P11137</u>
Cytogenetics:	2q34
Domains:	tubulin-binding

Protein Families:

Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS

Gene Summary:

This gene encodes a protein that belongs to the microtubule-associated protein family. The proteins of this family are thought to be involved in microtubule assembly, which is an essential step in neurogenesis. The products of similar genes in rat and mouse are neuron-specific cytoskeletal proteins that are enriched in dendrites, implicating a role in determining and stabilizing dendritic shape during neuron development. A number of alternatively spliced variants encoding distinct isoforms have been described. [provided by RefSeq, Jan 2010]
Transcript Variant: This variant (2) represents the shortest transcript and encodes the shortest isoform (2). Variants 2 and 8 encode the same isoform (2).