

## Product datasheet for **MC229635**

### Camsap1 (NM\_001276360) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Camsap1 (NM_001276360) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Camsap1
Synonyms:	9530003A05Rik; C77823; PRO2405
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC229635 representing NM_001276360 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTGGACGCGGGCGGTTCGCTGTGCCCGCAAGGCTGGAGGAGGATGGAGGCGCCCCGGAGGGCGCCG  
ACCTGGTGGCGCTGGACCGCTACGACCGCGCGGGCCAAAGATCGCCGCCAACCTGCAGTGGATCTGTGC  
GAAGGCCTATGGCCTAGACAACATCCCTGAGGACCTCCGAGACCGGTTTTACATCGACCAGTATGAGCAG  
GAGCACATTAAGCCACCGTTATCAAGCTTCTCCTGTCCAGTGTGATTGCGGTGTCTGCAGCCTCA  
TCCTAAAAGGGGACCAGGTGGCTACCTGCAAGGACACCAGTCTGTATCCAGGCCCTGTCCCGAAGGG  
CATCTATGTGATGGAGAGTGATGATACCCTGTGACAGATGCTGACCTCAGCCAGGCACCTATTAAGATG  
AGTGGCCACATGGCGATGGTGGATGCCCTGATGATGGCTTACACTGTGGAGATGATCAGCATTGAGAAGG  
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CATGGTATTCTGGATCAATAAGGTAAATCTTAAAATGAGAGAGATAACAGAGAAAAGTAAATAAAA  
CAGCAGCCACTGAAAAGTCCCGCTCATCAAAGTCTCCCTCCAAGTGGTATTGGAAGTTAGTACCCGTC  
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CGGCAGTGTGGCGCTGCTCTTAGCAGTGGTCACTATTATTGCCAGAGCAGATGAAACTGGATGAT  
ATCTGTCTGAAGGAGGTGCCATCAATGGCTGACAGCCTCTATAACATCCGCTTCTGAGGGAGTTTTCCA  
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GAACGTTATGGTTTTATCGCTGAGCTCTTCTGGTGGTTGAGAACGTCAAACCAGATTTTGTTCAGCCC  
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TCTCCAATGCAACCAAACGCAGCTTCTGGTAGCCCTGCTGCCATGAGCCCCGCTGACCAGCCACCATC  
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GGAGCTTCCACATTTAGTCCGTCATCCTTTGTTGCCACTGAGACAGAAACAGCAAAAAGTGTACAGA  
CAGAGGAAATCCCTGATCAGCGGCACAGGTGCAATTCTTTAACTCGGGTTGATGGTCAGCCACGAGGTGC  
AATAGGAGCATGGCCAGATAAAAAAACAGGCCTGTGTACAGCCAACATCATTTGCTCTCCATCATGCT  
GCAAGTTGTGATGGATCCAGTTCTGGTACAGTGTACAGTTAGTCCGCTCTATCAGCAAAGATAGCT



TGGCATCTAACATTATCCACCTGACCCACAGAACCCAGCCCCATCCCTCCGCTGGAAGAGCAATGGGAA  
AAGCCTCTGAGCAATGTCAACATTGAGGATGAGGACGAGGAGCTTGTAGCCATCATCAGGACAGATGTG  
TCTCCTCTTCCCACAGATGCCAGGACCTCACCTCAGGCCCCAGGCCCTGGTAGCAAGTATCAGGTCTC  
CCCAGAGACAGGCAGACACTTTGGAGAGTAAGCCTGACAGTTTTTACTTAGAACCCCTGATGCCAGCAGT  
ACTCCGGCCAGCCAAAGAGAAGCAGATTACCACTAAGGAAGATGAGCGTGGAGAAGGAAGGCCAAGGACC  
ATCATGGCCAAGAGGCCCTAGTGAGGGCTCCCAGCCTATGGTACGAAAGAAAGTAAAGTGGTGGCCATGGCA  
GTCGTGACCTGAACAGAACTTTACCCCAATTCCTTGTTCAGAATTTGCTGCGAGCATTGATCTTGGCGGA  
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CCTCAGGGGCAGGCTGCTGATGGTTTTCTTCTCCATGTAGGCAGGGCTGAGGAAGATGAGGGGAGGTGGT  
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TATGCTGGTGAGGAAGAGTCAGCCAACTACAGGAGGATATGAAAGTGAAGGAACATGAAGACAAGGATG  
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AGAAGAGGGAGCAGAGTCCAGGCAGGCACAGCAAGGACCCTGCCAGCCTGCTGGCTTCTGAGCTGGTGCA  
GCTGCACATGCAGCTGGAGGAAAAGCGCAGAGCTATTGAAGCCCAGAAGAAAAGATGGAGGCGCTGCC  
GCACGGCAGCGTCTGAAGCTGGGCAAGGCAGCCTTCTGCATGTGGTAAAGAAAGGGAAGGCTGATGGTG  
CCCCACAGCCACTGAGACCCGAACACTTCAAAAGGAATTCACACAGCACAATGGGGAGGACTTGGATGA  
TGGCACTTGTA AAACTGAAGGGTTCCTTGTCAAAGAAGAGCAGAGAGATCTCAGTGACGCTCAGGATGTG  
GCATTTGTCCAGTACATAAGCCAGGGACCCAGCTGCTCTGCATGATGGAGAGAAGCACAGAATGATTT  
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CAATGAGACCATCAGTACATTGACGACGGCTATACTGAAGATCTCCAGCAGCAAGAGCAGCTTCTCATG  
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GAATTCGCGCTCAGGAAGGCCGGCTGAAGTGAAGGTTCCAAAAGACAGGCAGCAGGGTGTCTCGGAGC  
AAAACCCCAACCCAGTGTGGAGACACTCCACAGTCAAGGTCTTTACCTCAAGTACCCATCCACGGT  
CACCTCCGACCCAGGCGGGGAACCTCCCTGAGAAGTGTCTCTTCGACAGTTATAGGCTCCATGATGAGAG  
TAACCATCGGACATTTGTTCTGCTCTTGCAAAGATGCAAACATTGTATCAGAACAGGTGAAGTTAA  
GAGGGTCTAGATAACAAGTGTGAAAGAGGCAGGGCTGAGCTCCTTACCATCACAGGCAAAGAACATACTC  
CAGTGGAAGAGCCGCTGAGGAGCAAGGCCAGCCTCATTGAGGTAGACCTCTCTGACCTGAAGGCCCTGA  
TGAGGATGGAGAGGTGGTTGGCCATGAGAGCTCGGTGGAGCTTGGTGGAGATAGTGACCAGAAGCCTGGG  
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TGAAACAGCAGCGCAAGGCTGAAGAGGCTCGTGCGCGCAAGCAGCAGCTGGAGGCAGAAGTGGAGCTCAA  
GCGAGATGAAGCCCGGCTAAGGCTGAAGAGGATCGACTACGGAAGGAGGAGGAGAAGGCCAAGGCGAGAG  
CTCATTAAACAGGAATACTTACGGAGGAAGCAGCAGCAGGCTTGGAGGAGCAAGGACTTGGCAAACCTA  
AATCAAAGCCTAAAAAGCCTCGGCCAAAGTCAGTTCACCGGAAGAGTCTTACAGCGACTCTGGCACCAA  
GTGCTCTTCTACCCATAACTTGAGCCAACTCACTCTGGCTCCAGCCTATCCTTGGCATCTGCAGCAACA  
ACAGAACCTGAGAGTGTATTCGGGGGGCACACCTTCTACCGAGTTGAATCACTGGAAGCTTTACCTA  
TCCTGAGCCGCAACCCAGTCCGAGCACAGACCGAGACTGGGAGACTGCATCAGCAGCTTCTCTTTGGC  
CTCTGTGGCTGAGTACACAGTCTTAACTCTTTAAGGAGCCAGTAGCAAAATAAAACAAACCAATTATT  
CACAATGCCATCTCCACTGCTGTCTGGCTGGAAGGTAATGAGCCTCACAAGAATTCAATATTGGAGG  
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TTACTGCTACCAACCCGACACTGAAGAAATCTACAACTCACTGGCACGGGGCCAAAAAGCATCACCAAG  
AAGATGATTGACAACTATATAATACAGCTCAGACCGAAAGCAGTTAACCTGATCCCAGCCAAGACCA  
TGTCAGTCAGCGTGGATGCACTCAGATCCATAACCCTTGTGGCAGCCCAAGCGGCCACGGTGCACAA  
GAAGACCCAGACTCGTAAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

<b>ACCN:</b>	NM_001276360
<b>Insert Size:</b>	4782 bp
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001276360.1</a></u> , <u><a href="#">NP_001263289.1</a></u>
<b>RefSeq Size:</b>	8029 bp
<b>RefSeq ORF:</b>	4782 bp
<b>Locus ID:</b>	227634
<b>UniProt ID:</b>	<u><a href="#">A2AHC3</a></u>
<b>Cytogenetics:</b>	2 A3
<b>Gene Summary:</b>	<p>Key microtubule-organizing protein that specifically binds the minus-end of non-centrosomal microtubules and regulates their dynamics and organization. Specifically recognizes growing microtubule minus-ends and stabilizes microtubules. Acts on free microtubule minus-ends that are not capped by microtubule-nucleating proteins or other factors and protects microtubule minus-ends from depolymerization. In contrast to CAMSAP2 and CAMSAP3, tracks along the growing tips of minus-end microtubules without significantly affecting the polymerization rate: binds at the very tip of the microtubules minus-end and acts as a minus-end tracking protein (-TIP) that dissociates from microtubules after allowing tubulin incorporation. Through interaction with spectrin may regulate neurite outgrowth.</p> <p>[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) contains an alternate in-frame exon in the 5' coding region compared to variant 1. The resulting protein (isoform 2) is longer compared to isoform 1.</p> <p>Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>