

## Product datasheet for MC224530

### Camsap2 (NM\_001081360) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Camsap2 (NM\_001081360) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Camsap2  
**Synonyms:** 1600013L13Rik; 4930541M15Rik; Camsap1I1; mKIAA1078  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC224530 representing NM\_001081360  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGGGATGCTGCAGACCCGCGGGAGATGAGAAGGACGTTTCATTGTTCCAGCCATCAAACCCCTTGACC  
 ACTATGACTTCTCCAGGGCCAAAATCGCCTGCAATCTGGCCTGGCTGGTGGCCAAAGCCTTTGGGACAGA  
 AAATGTGCCCGAGGAGCTTGGCGACCCATTTTACACAGACCAGTATGACCAGGAGCACATCAAACCCCT  
 GTCGTTAACCTGCTTCTGTGCGCCGAGCTGTACTGTGCGCTGGAAGCCTCATCCTCAAGAGCGATGCTG  
 CAAAGCCCTCCTGGCCATGATGCTGTGATCCAGGCATTAGCACAGAAAAGGCCTGTATGCTCACTGACCA  
 GGAGAACTGGTAACTGAAAGAGATCTCCACAAGAAACCCATACAGATGAGTGCACATTTGGCTATGATT  
 GATACTCTAATGATGGCTTACACTGTAGAGATGATCAGCATAGAAAAAGTAATTGCATGTGCTCAACAGT  
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ATGAGAGTACTACTACAAGCTTCCAAATGGGGCTTTACAAAACAGAGTGCTTCTAGACGAGTTCGGGAA  
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 CCACGGCCAGATCAGATCGCTAATGGCTTCTTTCTTATGGTCAAGATCTAAGTATCCTGAATTCAAATA  
 TCAAGCTAAACCAGTCCAGTCTGTATACTTAAGTACACAAAAGGTGCCTTGAGTCCCATAACAGACAC  
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 TTGAGAGATTACTGTTAGCTTAGACTCCGACATGGATGATGCATCTAAGCTTCTCAGGACTATGACC  
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 GAGCAGTGCCTCGTCTAGCTCTGGGGTGAAGATGACCAGCTTTGCTGAGCAGAAGTTCAGGAAGCTGAAT  
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 GGAACCTGACAAGCCCTCAGAAGAGACTTTAAATGAAGGAGAAAATCTTAGAGTATACAAAGTCCGATTGA  
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 GGCTAAGGAGGTTTTCCCAAGTCAGGTTCCCATTCAGACACGGTCATTTGTATGCTTTGGTGTAGTGG  
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 AAACCCCTGAAAAGGCTGATGTATCTGTTGAGAAGTTGGATGGAGAGAGTGATAAGGAACAGTTTGACG  
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 GCGAGCAGCTTTGCTGGAGAAACGGCTAAGAAGAGAGAAAAGAGACTCAGCTTCGGAAGCAGCAACTGGAA  
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 AGCGAGCAGGAGAGAGTTTATCAGGCAGGAATACATGAGGAGGAAACAGCTGAAACTGATGGAAGACAT  
 GGATACAGTAATCAAGCCTCGACCTCAGGCGGCTAAACAGAAAAAACAGCGGCCAAAAATCCATTCACAGA  
 GATCATATTGAATCTCCAAAAACACCGATCAAAGGCCCTCCAGTCTCTAGCCTCTCATTGGCATCGCTGA  
 ACACAGGTGATAGCGAGAGTGTTCAATTCGGGCAAGAGGACGCCAAGGTCGGAGTCTGTAGAAGGCTTCTT  
 ATCTCAAAGTCGTTGTGGCAGTCGGAATGGCGAGAAAAGACTGGGAAAACGCATCCACAACCTTCTCGGTG  
 GCTTCTGGAACAGAGTACACAGGACCAAAGCTTACAAGGAACCTAGTGCAAAAATCCAATAAACACATAA  
 TACAGAATGCTTAGCTCATTGCTGTCTGGCTGGAAAAGTAAATGAAGGTGAGAAGAAAAAATCCTAGA  
 GGAATGGAGAAGTCAGATGCCAACAACTTCTTAATCTTGTCCGGGATTCAGGCTGCCAGTTCAGGTCT  
 TTGTATACTTACTGCCAGAACTGAAGAAATCAATAAACTGACTGGGATAGGTCTAAATCTACTACTA  
 AAAAGATGATTGAGGACTTTACAAGTACAATTCTGACAGAAAAACAGTTTAGCCACATACCTGCTAAAAAC  
 TTTATCTGCTAGCGTGGATGCGATTACCATTATAGCCACTTATGGCAGACCAAGAGACCAGTAACCCCA  
 AAAAACTCTTACCCACTAAAGCATAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul  
 ACCN: NM\_001081360  
 Insert Size: 4437 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>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_001081360.1</a></u> , <u><a href="#">NP_001074829.1</a></u>
<b>RefSeq Size:</b>	7823 bp
<b>RefSeq ORF:</b>	4437 bp
<b>Locus ID:</b>	67886
<b>Cytogenetics:</b>	1 E4
<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 (PubMed:23169647). Specifically recognizes growing microtubule minus-ends and autonomously decorates and stabilizes microtubule lattice formed by microtubule minus-end polymerization (By similarity). Acts on free microtubule minus-ends that are not capped by microtubule-nucleating proteins or other factors and protects microtubule minus-ends from depolymerization (By similarity). In addition, it also reduces the velocity of microtubule polymerization (By similarity). Through the microtubule cytoskeleton, also regulates the organization of cellular organelles including the Golgi and the early endosomes (By similarity). Essential for the tethering, but not for nucleation of non-centrosomal microtubules at the Golgi: together with Golgi-associated proteins AKAP9 and PDE4DIP, required to tether non-centrosomal minus-end microtubules to the Golgi, an important step for polarized cell movement (By similarity). Also acts as a regulator of neuronal polarity and development: localizes to non-centrosomal microtubule minus-ends in neurons and stabilizes non-centrosomal microtubules, which is required for neuronal polarity, axon specification and dendritic branch formation (By similarity). Through the microtubule cytoskeleton, regulates the autophagosome transport (By similarity).</p> <p>[UniProtKB/Swiss-Prot Function]</p>