

## Product datasheet for MC224260

### Cntnap2 (NM\_001004357) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cntnap2 (NM\_001004357) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Cntnap2  
**Synonyms:** 5430425M22Rik; Caspr2; mKIAA0868  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC224260 representing NM\_001004357  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGGATCGCC

ATGGTGATGTCTCTGAGAGCAGGCTACAGGGCAGCGCTCTCGCTCTGGATTCTCAGCAGCTTCATCTGCA  
 GAGCCTGGACAGCTCCCTCCACGTTCCAAAAATGTGATGAGCCTCTCATCTCTGGTCTTCCCATGTGTC  
 CTTCAGCAGCTTCTCCTCCCTGTCCAGCAGCTATGCACCTGGTTATGCCAAGATTAATAAACGAGGAGGT  
 GCTGGGGGATGGTCTCCATCAGACAGTGACCACTATCAATGGCTTCAGGTTGATTTTGGTAAATCGGAAGC  
 AGATCAGTGCCATTGCAACCCAAGGAAGGTACAGCAGTCTGATTGGGTGACACAATATCGAATGCTCTA  
 CAGTGACACAGGGAGAACTGGAAACCTATCATCAAGATGGCAATATCTGGGCTTTCCAGGAAACGTC  
 AATTCTGACAGCGTGGTCCGACACGACCTGCAGCATGCAGTAGTTGCCGTTATGTACGCGTTGTGCCCT  
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 TATCAACTTTGATGGCCACGGTGTGTTACCATATCGATTGAGAAACAAGAAGTAAAAACTCAAGAT  
 GTTATTGCTTTGAAATTAAGACCTCTGAAAGTGAAGGAGTACTTTTGCATGGTGAAGGACAGCAAGGGG  
 ATTACATTACTTTGAACTGAAAAAGCAAAGCTGGTCCTCAGTTTAAATCTAGGAAGCAACCAGCTTGG  
 CCCATCTATGGCCACACATCTGTGACATCTGGGAGCCTGCTGGATGATCACCCTGGCACTCTGTACTC  
 ATTGAGCGCCAGGGACGACGATTAACTTGACCCTGGACAGGAGCATGCAGCATTTCGACCAATGGAG  
 AGTTTGACTACCTGGACTTGGACTATGAGATAACATTTGGAGGCATACCTTTCTCTGGTAAGCCAAGTTC  
 CAGTAATAGGAAGAACTTCAAGGGCTGCATGGAAGCATCAACTACAATGGTGTCAATATTACCGATCTT  
 GCCCGAAGAAAGAAATAGAGCCATCAATATGGGGAATCTGAGTTTCTCTTGTGTGGAGCCCTATACAG  
 TACCAGTCTTCTCAATGCTACAAGCTACCTGGAGGTACCTGGCAGACTTAATCAGGACCTGTTCTCAGT  
 CAGTTTCCAGTTTAGGACTTGAACCCAGCGGTCTCTGCTCTTCAGTCACTTTCAGATAAATTGGGC  
 AATGTGGAGATTGACCTTGTAGAGAGCAAAGTGGCGTCCACATAAACAACACACAGACCAAGACAAGCC  
 AAATTGACATCTCCTCAGGCTCCGGGCTGAATGATGGGAGTGGCATGAGGTTCCCTTCCTGGCCAGGA  
 AAATTTCGAGTCTCACCATTGATGGAGATGAAGCATCAGCAGTTCCGACCAATAGTCCTCTTCAAGTG  
 AAGACTGGCGAGAAATACTTCTTTGGAGGATTTCTGAACCACATGAACAATGCCAGTACTCTGCCCTTC



AGCCATCATCCAAGGATGCATGCAGCTCATTACAGGTAGATGACCAGCTTGTGAATTTATACGAAGTAGC  
 ACACAGGAAGCCAGGAAGCTTCGCAATGTCCACATTGACATGTGTGCCATCATAGACAGATGTGTGCC  
 AACTACTGTGAGCATGGTGGAAAGTGCTCGCAACATGGGACAGCTTCAAATGCCTTGTGATGAGACAG  
 GATACAGCGGGGCCACCTGCCACAACCTCATCTACGAGCCCTCCTGTGAAGCATACAACACCTTGGCCA  
 GACATCAAATTACTACTGGATAGATCCTGATGGCAGTGGACCACTGGGCCTCTGAAGGTTTATTGCAAC  
 ATGACAGAGGACAAGGTGTGGACCATAGTGTCTCATGACTTACAGATGCAGACGACAGTGGTAGGCTACA  
 ACCAGAAAAGTACTCTGTGACACAGCTTATCTACAGTGCCTCCATGGACCAGATTAGTGCATCACCAG  
 TAGCGCCGAGTACTGCGAACAGTACGTCTCCTACTTCTGCAGGATGTCCAGGTTGTTGAACACCCAGAT  
 GGAAGTCTTACACCTGGTGGGTGGCAAAGCCAATGAGAAGCACTACTACTGGGGAGGATCAGAGCCTG  
 GAATTCAGAAGTGTGCCTGTGGCATAGAGCGCAACTGCACAGATCCCAAGTACTACTGCAACTGTGATGC  
 TGACTACAAGCAGTGGAGGAAGGATGCTGGTCTTATCCTACAAAGTACACTGCCAGTGGCCAGGTG  
 GTGGTTGGAGATACTGACCGACAAGGCTCAGAAGCCAAGCTGAGTGTGGTCCCCTGCGTCCCAAGGAG  
 ACAGAAATTTGGAATGCTGCCTCCTCCCAAACCCATCATCTACCTGCATCTCTACCTTCCAAGG  
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 GGAACACAGACTTCATCAAGCTGGAGCTCAAGTCTGCCACAGAAGTGCCTTTTCATTTGATGTTGGAA  
 ACGGGCCAGTGGAGATCGTGGTGGAGTACCTTCACTTCAATGATGACCAGTGGCATCGGGTCACTGC  
 AGAGAGGAATGTCAAGCAGGCCAGTCTCCAGGTGGATCGCTGCCCCAGCAAATCCGAAAAGCCCGACT  
 GAAGGTCAACCCGCTGGAAGTCTACAGTCACTGTTTGTGGTGGTGTGGAGGCCAGCAGGGCTTCC  
 TAGGCTGCATCCGCTCCTTGAGGATGAATGGAGTAACACTTGACTTGAAGAAAGGGCGAAGGTCAATC  
 TGGGTTCAAGTCTGGATGCTCAGGCCACTGCACCAGCTATGGGGCTAACTGTGAAAATGGAGGCAATGC  
 ATCGAAAATACCATGGTACTCCTGCGACTGCTCTAACACAGCCTATGATGGGACATTTGCAACAAAG  
 ATGTTGGTGCCTTTTTGAAGAAGGCATGTGGCTGCGCTATAACTTCCAGGCCAGCGGTCACTGCCAG  
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 CAGATCCACTTTAGCTTCAAGTCACTACCAAGGCACCTGCATCCTCCTCTATGTCAGTCCCTCACCCTG  
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 GCCATTCAATATTGACGTAGACCACAGGAACATGGCCAATGGACAGCCGCACAGTGTCAACATCACCCGG  
 CATGAGAGGACCATAATTCTCAAGCTCGACCATATCCTGCTGTGGGTTACCATCTACCCAGCTCCTCTG  
 ATACGCTCTTCAATTCTCCAAGTCTCTTCTTGGAAAAGTTATAGAAACGGGAAAAATCGACCAAGA  
 AATTCACAAATACAACACCCAGGCTTACAGGCTGCCTGTCCAGAGTCCAGTTCACCACATCGCCCT  
 CTCAAGGCAGCCTTGAGACAGACAAACGCTCAGCCACGTGCACATTCAGGGTGGAGTGGTGAATCTA  
 ACTGCGGGCCCTCCCACTGACGCTTTCCCAATGTCTTACGCCACTGACCTTGGCACCTAGATCACTT  
 GGATTCAGCCAGTGTGATTTCCCATATAACCCAGGACAAGGCCAAGCTATAAGAAATGGAGTCAACAGA  
 AACTCAGCTATCATTGGAGGGGTGATCGCTGTGGTGTATTTTACCATCCTCTGCACCCTGGTCTTCTCA  
 TCCGGTACATGTTCCGTACAAGGGCACCTACCACACCAATGAGGCCAAGGGAGCTGAGTCAAGCCAGAG  
 TGCAGATGTGCCATCATGAACAACGACCCCAACTTACAGAGACCATTGACGAGAGCAAAAAGGAGTGG  
 CTCATTGA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-RsrII  
**ACCN:** NM\_001004357  
**Insert Size:** 3999 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**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\\_001004357.2](#), [NP\\_001004357.2](#)

**RefSeq Size:** 7002 bp

**RefSeq ORF:** 3999 bp

**Locus ID:** 66797

**UniProt ID:** [Q9CPW0](#)

**Cytogenetics:** 6 B2.2- B2.3

**Gene Summary:** Required, with CNTNAP1, for radial and longitudinal organization of myelinated axons (PubMed:25378149). Plays a role in the formation of functional distinct domains critical for saltatory conduction of nerve impulses in myelinated nerve fibers. Demarcates the juxtaparanodal region of the axo-glia junction (Probable) (PubMed:25378149). [UniProtKB/Swiss-Prot Function]