

## Product datasheet for MC224099

### Nrcam (NM\_176930) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nrcam (NM_176930) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Nrcam
Synonyms:	Bravo; C030017F07Rik; C130076O07Rik; mKIAA0343
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC224099 representing NM_176930 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCAGCTTAAAATAATGCCGAAGAAGAAGCACTTATCTGCAGGGCGGAGTGCCCTGATTCTCTTCTGT  
GCCAGATGATCAGCGCGCTGGATGTTCTCTCGATCTGGTACAACCTCCAACCATCACTCAACAGTCACC  
AAAAGACTACATCATTGACCCTCGGAGAATATTGTAATCCAGTGTGAGGCCAAAGGGAAACCTCCCCCA  
AGCTTTTCTGGACTCGTAATGGAACCTACTTTGACATAGACAAGGACCTCTGGTCACCATGAAGCCTG  
GCTCAGGAACCTTGTCATCAACATCATGAGTGAGGGGAAGGCAGAGACCTATGAAGGAGTCTACCAGTG  
CACTGCAAGGAACGAGCGTGGAGCTGCCGTCTCCAATAACATTGTTGTCCGCCATCTAGGTCACCCTTG  
TGGACCAAGGAAAGACTTGAACCTATAGTACTCCAGAATGGGCAGTCATTAGTACTTCCATGTAGGCCTC  
CGATTGGATTACCTCCGGCCATAATATTTGGATGGATAATTCTTTTCAGAGACTCCACAGAGTGAGCG  
GGTTTCCCAAGGCCTAAATGGAGACCTTACTTCTCCAATGTCTCCAGAGGACACCCGTGAGGACTAT  
ATCTGCTATGCCAGATTTAATCACACTCAAACCATCCAGCAGAAGCAGCCTATTTCTTTGAAGTGATTT  
CAGTGGATGAATTGAATGACACTATAGCTGCTAATTTGAGTGACACTGAGTTTTATGGTGCTAAATCTAG  
TAAAGAGAGGCCCAACGTTTCTAACTCCAGAGGGCAATGAAAGCCACAAGAGGAATTAAGAGGAAAC  
GTGCTTTCGCTGGAGTGATTGCGGAAGGCCTACTACTCCAATTTACTGGATCAAAGAAGACGGAA  
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CGACTCTGGAAATATCAGTGATAGCAAAAAACGCATTAGGAGCCGTCCATCACACCATTTCTGTCACT  
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TCATCTGCAGAGCTAATGGCAACCCGAAACCCAGAATTAGCTGGTTAACAATGGAGTCCCAATAGAAAT  
TGCTCTCGATGACCCAGCAGAAAAATAGATGGCGATACCATTATTTTTCAAATGTTCAAGAAAGCTCA  
AGTGCGGTTTATCAGTGAATGCCTCTAACAAATATGGATATTTACTAGCAAATGCATTTGTAATGTTT  
TCGCTGAACACCTCGGATTCTCACATCAGCAAACACACTGTACCAGGTCATTGCAAACAGGCCTGCTTT  
GCTAGATTGTGCCTTCTTTGGATCTCCTATGCCTACCATTGAGTGGTTTAAAGGCACTAAAGGAAGCGCT  
CTTCATGAAGACATTTATGTTTTGCATGATAATGGAACATTAGAAATTCCTGGGCCAAAGGATAGTA



CAGGGACGTACTTGTGTCGCACGGAATAAACTAGGGATGGCAAAGAATGAAGTTCACCTTGAAATCAA  
 AGATCCAACCAGGATCATTAAACAACCTGAGTATGCAGTCGTCCAGAGGGGAGCAAGGTGTCCTTTGAA  
 TGCAGAGTGAAACATGACCACACCTTAATCCCCACCATTATGTGGCTGAAGGACAATGGAGAGCTGCCCA  
 ATGATGAAAGGTTCTCCACTGACAAGGATCATCTGGTGGTATCTGATGTAAGGATGACGATGGCGGAAC  
 CTACACGTGTACGGCCAAACAACGCTGGACAGTGCTTCGGCCAGCGCTGTGCTCAGGGTGTGCTCCT  
 ACTCCAACCTCCAGCCCCATTTACGATGTCCCGAATCCTCCCTTGATTTAGAATTGACCAATCAACTTG  
 ACAAAAAGTGTTTCAGCTGACATGGACCCAGGCCAGCACAACAATAGCCCCATTACAAAATTCATCATTGA  
 GTATGAAGATGCAATGCATGATGCAGGGCTGTGGCGCCACCAGGCTGAAGTTTCTGGAACACAGACCACA  
 GCCCAACTGAAGCTGTCTCCCTATGTGAACTACTCCTTCCGTGTCATGGCAGAGAACAGCATTGGGAGAA  
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 GGAAGGACTAGGGACAGAGCCGGACAACCTGGTGATTACATGGAAGCCCCTGAATGGTTTTCAATCGAAT  
 GGGCCTGGCTCCAGTACAAAGTGAGCTGGCGCCAGAAAGATGGTGACGATGAGTGGACGCTGTGGTTG  
 TGGCCAATGTATCCAAATACATTGTTTCTGGCACACCAACCTTTGTCCATACCTGATAAAAGTTCAAGC  
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 GTGGCTCCTGAAATGTTTCGCGTCAGCGTGGTGAACAGTACGCTGGCAGAGGTGCACTGGGACCCAGTTC  
 CTCCCAAGAGTGTCCGAGGACACTTACAAGGCTACCGGATTTACTACTGGAAGACCCAGAGCTCCTCTAA  
 AAGAAACAGGCGCCACATTGAGAAGAAGATCCTCACCTTCCAGGGCACCAGACTCACGGCATGCTGCCA  
 GGGCTGCAGCCATACAGTCACTATGCCCTCAACGTCCGAGTGGTCAACGGGAAAGGGGAGGGCCAGCCA  
 GCACGGACAGAGGCTTCCATACACCGGAGGGAGTCCCTAGTGCTCCCTCATCTTTGAAAATTGTTAATCC  
 CACACTGGACTCCCTCACTTTGGAATGGGACCCCCAAGCCACCCAAATGGCATCCTGACTGAGTACATC  
 TTACAATATCAGCCAATTAACAGCACACATGAGCTAGGCCCTCTGGTAGATTTAAAAATTCCTGCCAACA  
 AGACCCGCTGGACTTTGAAAAATTTAAATTTTCAGCACTCGGTACAAGTTCTATTTCTATGCACAGACATC  
 AGTGGGGCCAGGCAGTCAGATCACAGAGGAAGCGATAACGACTGTGGACGAAGCTGGTATTCCTCCACT  
 GATGTAGGTGCAGGCAAAGGCAAAGAAGAAATGGAGGAAAGAAATGTAATGGTTCTCGAAGCTTCTTTG  
 GGTAAAGGGTCTAATGCCAGGAACAGCATACAAAGTTCGAGTTGGTGTGAGGGGGACTCTGGTTTTGT  
 GAGTTCAGAGGATGTGTTTGAGACAGGACCAGCAATGGCAAGCCGGCAAGTGGATATCGCAGCCCAAGGC  
 TGGTTCATAGGTCTAATGTGCGCTGTTGCTCCTCATCTTAATTTTGTGATTGTTTGTTCATCAGAA  
 GAAACAAAGGTGGTAAATACCCAGTTAAAGAAAAGGAGGATGCTCATGCAGACCTGAAATCCAGCCCAT  
 GAAGGAAGATGATGGGACGTTTGGAGAATACAGTATGCAGAAGATCACAAGCCTTTGAAAAAGGAAGT  
 CGAACACCTTCAGACAGGACTGTGAAAAAGAAGATAGCGATGATAGTCTGGTTGACTATGGAGAGGGGG  
 TGAAACGCAATTAACGAGGATGGCTCCTTTATTGGCCAATACAGTGGTAAGAAAGAGAAGAGCCAGC  
 AGAGGGAAATGAAAGCTCAGAGGCCCTTCTCCTGTCAACGCAATGAACTCCTTTGTTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

Sgfl-MluI

**ACCN:**

NM\_176930

**Insert Size:**

3771 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:**

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\\_176930.4](#), [NP\\_795904.3](#)

**RefSeq Size:** 7572 bp

**RefSeq ORF:** 3771 bp

**Locus ID:** 319504

**UniProt ID:** [Q810U4](#)

**Cytogenetics:** 12 20.71 cM

**Gene Summary:** Cell adhesion protein that is required for normal responses to cell-cell contacts in brain and in the peripheral nervous system. Plays a role in neurite outgrowth in response to contactin binding (PubMed:11564762). Plays a role in mediating cell-cell contacts between Schwann cells and axons (PubMed:20188654). Plays a role in the formation and maintenance of the nodes of Ranvier on myelinated axons. Nodes of Ranvier contain clustered sodium channels that are crucial for the saltatory propagation of action potentials along myelinated axons. During development, nodes of Ranvier are formed by the fusion of two heminodes. Required for normal clustering of sodium channels at heminodes; not required for the formation of mature nodes with normal sodium channel clusters (PubMed:14602817, PubMed:20188654). Required, together with GLDN, for maintaining NFASC and sodium channel clusters at mature nodes of Ranvier (PubMed:24719088).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). 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.