

Product datasheet for **RC230893**

NrCAM (NM_001193584) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NrCAM (NM_001193584) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NRCAM
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC230893 representing NM_001193584 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGCAGCTTAAAATAATGCCGAAAAAGAAGCGCTTATCTGCGGGCAGAGTGCCCCTGATTCTCTCTCTGT
GCCAGATGATTAGTGCAGTGAAGTACCTCTTGATCCTTGAAGACTTGGTACAGCCTCCAAC
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AAAGGGAACCGCCCCAAGCTTTCTGGACCGTAATGGGACTCATTTTGACATCGATAAAGACCCTC
TGGTCACCATGAAGCCTGGCACAGGAACGCTCATAATTAACATCATGAGCGAAGGAAAGCTGAGACCTA
TGAAGGAGTCTATCAGTGTACAGCAAGGAACGAACGCGGAGCTGCAGTTTCTAATAACATTGTTGTCCGC
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ACTTCCACAAAGTGAGAGAGTTTCTCAAGGTTGAATGGGACCTTTATTTTCCAATGTCCTCCAGAG
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GCTGGTTAACAATGGAGTCCCAATAGAAATGCCCCTGATGACCCAGCAGAAAAATAGATGGCGATAC
CATTATTTTTTCAAATGTTCAAGAAAGATCAAGTGCAGTATATCAGTGAATGCCTCTAATGAATATGGA
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CTGTGGCTGAAGGACAACAGGGAAGTCCAGTGTGAAAGGTTCACTGTTGACAAGGATCATCTAGTGG
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Protein Sequence:

>RC230893 representing NM_001193584

Red=Cloning site Green=Tags(s)

MLKIMPKKKRLSAGRVPLILFLCQMISALEVPLDPKLLEDLVQPPTITQQSPKDYIIDPRENIVIQCEA
KGKPPPSFSWTRNGTHFDIDKDLVTMKGPTGTLIINIMSEGKAETIEGVYQCTARNERGAASVNNIVVR
PSRSPLWTKLEPITLQSGQSLVPCRPPIGLPPPIIFWMDNSFQRLPQSERSQGLNGDLYFSNVLPE
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LVLSPGEDGTLICRANGNPKPRI SWLTNGVPIEIPDDPSRKIDGDTIIFSNVQERSASVYQCNASNEYG
YLLANAFVNVLAEPPIRLTPANTLYQVIANRPALLDCAFFGSPLPTIEWFKGAKGSALHEDIYVLHENG
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LWLKDNRELPSDERFTVDKDLVVADVSDDDSGTYTCTVANTLDSVSASAVLSVVAPTPTPAPVYDVPNP
PFDLELTDQLDKSVQLSWTPGDDNNSPITKFIIEYEDAMHKPGLWHHQTEVSGTQTAAQLKLSYVNYSF
RVMAVNSIGKSLPSEASEQYLTKASEPDKNPTAVEGLGSEPDNLVITWKPLNGFESNGPGLQYKVSQRQK
DGDEWTSVVVANYSKYIVSGTPTFVPYLIKVQALNDMGFAPEPAVVMGHSGEDLPMVAPGNVRNVVNS
TLAEVHWDVPVPLKSIRGHLQGYRIYYWKTQSSSRNRNRHIEKKILTFQGSKTHGMLPGLEPFSHYTLNVR
VYNGKGEPAASPDVFNTPGVPSPAPSSSLKIVNPTLDSLTLWDPPSHPNGILTETLYKQPINSTHEL
PLVDLKIPANKTRWTLKNLNFSTRYKFYFYAQTSAAGSGSQITEEAVTTVDEAMASRQVDIATQGWFIGLM
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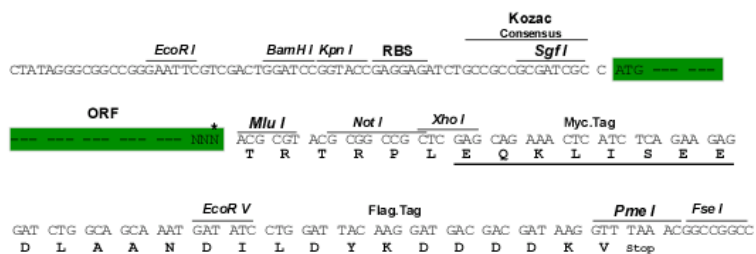
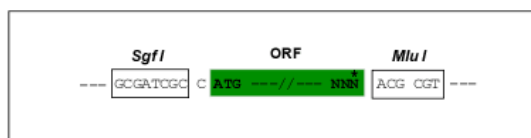
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

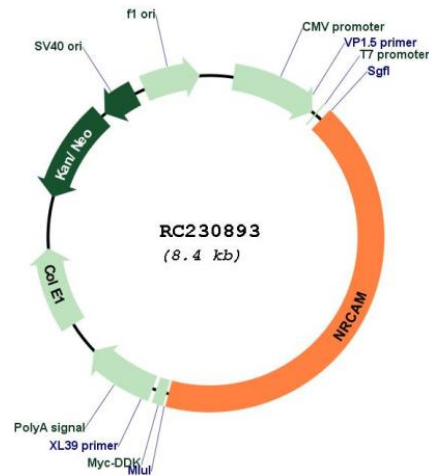
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001193584

ORF Size: 3540 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001193584.1](#), [NP_001180513.1](#)

RefSeq ORF: 3543 bp

Locus ID: 4897

UniProt ID: [Q92823](#)

Cytogenetics: 7q31.1

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs)

MW: 131.1 kDa

Gene Summary: Cell adhesion molecules (CAMs) are members of the immunoglobulin superfamily. This gene encodes a neuronal cell adhesion molecule with multiple immunoglobulin-like C2-type domains and fibronectin type-III domains. This ankyrin-binding protein is involved in neuron-neuron adhesion and promotes directional signaling during axonal cone growth. This gene is also expressed in non-neural tissues and may play a general role in cell-cell communication via signaling from its intracellular domain to the actin cytoskeleton during directional cell migration. Allelic variants of this gene have been associated with autism and addiction vulnerability. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]