

Product datasheet for RC224799

L1CAM (NM_024003) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	L1CAM (NM_024003) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	L1CAM
Synonyms:	CAML1; CD171; HSAS; HSAS1; MASA; MIC5; N-CAM-L1; N-CAML1; NCAM-L1; S10; SPG1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC224799 representing NM_024003 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTCGTGGCGCTGCGGTACGTGTGGCCTCTCCTCCTCTGCAGCCCCTGCCTGCTTATCCAGATCCCCG
AGGAATATGAAGGACACCATGTGATGGAGCCACCTGTCATCACGGAACAGTCTCCACGGCGCCTGGTTGT
CTTCCCCACAGATGACATCAGCCTCAAGTGTGAGGCCAGTGGCAAGCCCCAAGTGCAGTTCGGCTGGACG
AGGGATGGTGTCCACTTCAAACCAAGGAAGAGCTGGGTGTGACCGTGTACCAAGTGCAGTTCGGCTGGACG
CCTTACCACATCACGGGCAACAACAGCAACTTTGCTCAGAGGTTCCAGGGCATCTACCGCTGCTTTGCCAG
CAATAAGCTGGGACCGCCATGTCCATGAGATCCGGCTCATGGCCGAGGGTGCSCCAAGTGGCCAAAG
GAGACAGTGAAGCCCCTGGAGGTGGAGGAAGGGGAGTCACTGGTTCTGCCTTGAACCCCTCCCCAAGT
CAGAGCCTCTCCGGATCTACTGGATGAACAGCAAGATCTTGCACATCAAGCAGGACGAGCGGGTACGAT
GGGCCAGAACGGCAACCTCTACTTTGCCAATGTGCTCACCTCCGACAACCACTCAGACTACATCTGCCAC
GCCCACCTCCCAGGACCCAGGACCATCATTAGAAGGAACCCATTGACCTCCGGGTCAAGGCCACCAACA
GCATGATTGACAGGAAGCCGCGCCTGCTTTCCCAACCACTCCAGCAGCCACCTGGTGGCCTTGCAGGG
GCAGCCATTGGTCTGGAGTGCATCGCCGAGGGCTTTCCACGCCACCATCAAATGGCTGCGCCCCAGT
GGCCCCATGCCAGCCGACCGTGTACCTACCAGAACCACAACAAGACCCTGCAGTGTCTGAAAGTGGGCG
AGGAGGATGATGGCGAGTACCGCTGCCTGGCCGAGAACTCACTGGGCAGTGCSCGGCATGCGTACTATGT
CACCGTGGAGGCTGCCCGTACTGGCTGCACAAGCCCCAGAGCCATCTATATGGGCCAGGAGAGACTGCC
CGCCTGGACTGCCAAGTCCAGGGCAGGCCCAACCAGAGGTACCTGGAGAATCAACGGGATCCCTGTGG
AGGAGCTGGCCAAAGACCAGAAGTACCGGATTACGCGTGGCGCCCTGATCCTGAGCAACGTGCAGCCCAG
TGACACAATGGTACCCAATGTGAGGCCGCAACCGGCACGGGCTTTGCTGGCCAATGCCTACATCTAC
GTTGTCCAGCTGCCAGCAAGATCCTGACTGCGGACAATCAGACGTACATGGCTGTCCAGGGCAGCACTG
CCTACCTTCTGTGCAAGGCTTCGAGGCGCCTGTGCCAGTGTTCAGTGGCTGGACGAGGATGGGACAAC
AGTGCTTCAGGACGAACGCTTCTCCCCTATGCCAATGGGACCCTGGGCATTGAGACCTCCAGGCCAAT
GACACCGGACGCTACTTCTGCCTGGCTGCCAATGACAAAACAATGTTACCATCATGGCTAACCTGAAGG



TTAAAGATGCAACTCAGATCACTCAGGGCCCCGAGCACAATCGAGAAGAAAGTTCCAGGGTGACCTT
CACGTGCCAGGCCTCCTTTGACCCTCCTTGCAGCCCAGCATCACCTGGCGTGGGGACGGTCGAGACCTC
CAGGAGCTTGGGGACAGTGACAAGTACTTCATAGAGGATGGGCGCCTGGTCATCCACAGCCTGGACTACA
GCGACCAGGGCAACTACAGCTGCGTGGCCAGTACCGAAGTGGATGTGGTGGAGAGTAGGGCACAGCTCTT
GGTGGTGGGGAGCCCTGGGCCGTTGCCACGGCTGGTGTGTCGACCTGCACCTGCTGACGCAGAGCCAG
GTGCGCGTGTCTGGAGTCTGCAGAAGACCACAATGCCCCATTGAGAAATATGACATTGAATTTGAGG
ACAAGGAAATGGCGCCTGAAAAATGGTACAGTCTGGGCAAGTTCCAGGGAACCAGACCTTACCACCT
CAAGCTGTGCCCCATGTCCACTACACCTTTAGGGTTACTGCCATAAACAAATATGGCCCCGGGGAGCCC
AGCCCCGTCTCTGAGACTGTGGTCACACCTGAGGCAGCCCCAGAGAAGAACCCTGTGGATGTGAAGGGG
AAGGAAATGAGACCACCAATATGGTCATCACGTGGAAGCCGCTCCGGTGGATGGACTGGAACCCCCCA
GGTTTCAGTACCGCGTGCAGTGGCGCCCTCAGGGGACACGAGGGCCCTGGCAGGAGCAGATTGTGACGAC
CCCTTCTGGTGGTGTCCAACACGTCCACCTTCGTGCCCTATGAGATCAAAGTCCAGGCCGTCAACAGCC
AGGGCAAGGGACCAGAGCCCCAGGTCACTATCGGCTACTCTGGAGAGGACTACCCCCAGGCAATCCCTGA
GCTGGAAGGCATTGAAATCCTCAACTCAAGTCCCGTGTGGTCAAGTGGCGCCGGTGGACTGGCCAG
GTCAAGGGCCACCTCCGCGGATACAATGTGACGTACTGGAGGGAGGGCAGTCAGAGGAAGCACAGCAAGA
GACATATCCACAAAGACCATGTGGTGGTGGCCCGCAACACCACCAAGTGTATCCTCAGTGGCTTGGCGCC
CTATAGCTCCTACCACCTGGAGGTGCAGGCCTTAAACGGGCGAGGATCGGGGCCCGCCAGCGAGTTCACC
TTCAGCACCCAGAGGGAGTGCCTGGCCACCCGAGGCGTTGCACCTGGAGTGCCAGTCGAACACCAGCC
TGCTGTGCTGCGCTGGCAGCCCCACTCAGCCACAACGGCGTGTCAACCGGCTACGTGCTCTCTACCACCC
CCTGGATGAGGGGGGCAAGGGGCAACTGTCTTCAACCTTCGGGACCCCGAACTTCGGACACACAACCTG
ACCGATCTCAGCCCCACCTGCGGTACCGCTTCCAGCTTCCAGGCCACCACAAAGAGGGCCCTGGTGAAG
CCATCGTACGGGAAGGAGGCACATGGCCTTGTCTGGGATCTCAGATTTGGCAACATCTCAGCCACAGC
GGGTGAAAACTACAGTGTCTCTCTGGGTCCCCAAGGAGGGCCAGTCAACTTCAGTTCCATATCTTG
TTCAAAGCCTTGGGAGAAGAGAAGGGTGGGGCTTCCCTTTCGCCACAGTATGTCAGCTACAACCAGAGCT
CCTACACGCAGTGGGACCTGCAGCCTGACACTGACTACGAGATCCAATTGTTTAAGGAGAGGATGTTCCG
GCACAAATGGCTGTGAAGACCAATGGCACAGGCCGCGTGGGCTCCCTCCTGCTGGCTTCGCCACTGAG
GGCTGGTTCATCGGCTTTGTGAGTGCCATCATCTCCTGCTCCTCGTCTGCTCATCCTCTGCTTCATCA
AGCGCAGCAAGGGCGGCAAACTCAGTGAAGGATAAGGAGGACACCCAGGTGGACTCTGAGGCCCGACC
GATGAAAGATGAGACCTTCGGCGAGTACAGTGACAACGAGGAGAAGGCCTTGGCAGCAGCCAGCCATCG
CTCAACGGGGACATCAAGCCCCGGGCAGTACGACAGCCTGGCCGATTATGGGGCAGCGTGGATGTT
AGTTCAACGAGGATGGTTCGTTTATTGGCCAGTACAGTGGCAAGAAGGAGAAGGAGCGGCAGGGGGCAA
TGACAGCTCAGGGGCCACTTCCCCATCAACCCTGCCGTGGCCCTAGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC224799 representing NM_024003
 Red=Cloning site Green=Tags(s)

```

MVVALRYVWPLLLCSPCLLIQIPEEYEGHHVMEPPVITEQSPRRLVVFPTDDISLKCEASGKPEVQFRWT
RDGVHFKPEELGVTVYQSPHSGSFTITGNNSNFAQRFGQIYRCFASNKLGTA MSHEIRLMAEGAPKWPK
ETVKPVEVEEGESVVLPCNPPPSAEPLRIYWMNSKILHIKQDERVTMGQNGNLYFANVLTSDNHSYDICH
AHFPGTRTIIQKEPIDLRVKATNSMIDRKPRLLFPTNSSSHLVALQGQPLVLECIAEGFPPTTIKWLRPS
GMPMPADRVTYQNHKNTLQLLKVGEEDDGEYRCLAENSLGSARHAYVTVVEA APYWLHKPQSHLYGPGETA
RLDCQVQGRPQPEVTRWINGIPVEELAKDQKYRIQRGALILSNVQPSDTMVTQCEARNRHGLLL ANAYIY
VVQLPAKILTADNQT YMAVQGSTAYLLCKAFGAPVPSVQWLDEDGTTVLQDERFFPYANGTLGIRD LQAN
DTGRYFCLAANDQNNVTIMANLKVKDATQITQGPRSTIEKKGSRVFTTCQASFDPSLQPSITWRGDGRDL
QELGSDKYFIEDGRLVIHSLDYSQGNYSVASTELDVVESRAQLLVGSPGPVPRLLVSDLHLLTQSQ
VRVSWSPAEDHNAPIEKYDIEFEDKEMAPEKWYSLGKVPGNQSTTLKLSPYVHYTFRVTAINKYGPGE
SPVSETVVTPEAAPEKNPVDVKGEGNETNMVITWKPLRWMWNAPQVQYRVQWRPQGT RGPWQEIVSD
PFLVVSNTSTFVPYEIKVQAVNSQKGKPEPQVTIGYSGEDYPQAIPELEGIEILNSSAVL VKWRPVDLAQ
VKGHLRGYNVTYWREGSQRKHSKRHIHKDHVVVPANTTSVILSGLRPYSSYHLEVQAFNGRSGSPASEFT
FSTPEGVPGHPEALHLECSQNTSLLLWQPPLSHNGVL TGYVLSYHPLDEGGKGLSFNLRDPEL RTHNL
TDLSPHLRYRFQLQATTKEGPGEAIVREGGTMALSGISDFGNISATAGENYSVSWVPKEGQC NFRFHIL
FKALGEEKGGASLSPQYVSYNQSSYTQWDLQPD TDYEIHLFKERMFRHQMAVKTNGTGRVRLPPAGFATE
GWFIGFVSAIILLLLVLILCFIKRSKGGKYSVKDKEDTQVDSEARPMKDETFGEYS DNEEKAFGSSQPS
LNEDIKPLGSDDSLADYGGSDVQVFNEDGSF IGQYSGKKEKEAAGGNDSSGATSPINPAVALE
    
```

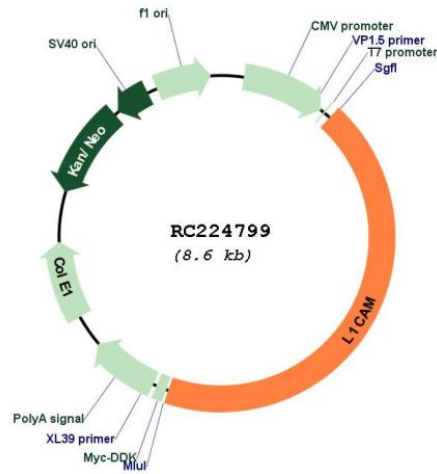
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_024003

ORF Size: 3759 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_024003.3](#)

RefSeq Size: 5034 bp

RefSeq ORF: 3762 bp

Locus ID: 3897

UniProt ID: [P32004](#)

Cytogenetics:	Xq28
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
Protein Pathways:	Axon guidance, Cell adhesion molecules (CAMs)
MW:	139.5 kDa
Gene Summary:	<p>The protein encoded by this gene is an axonal glycoprotein belonging to the immunoglobulin supergene family. The ectodomain, consisting of several immunoglobulin-like domains and fibronectin-like repeats (type III), is linked via a single transmembrane sequence to a conserved cytoplasmic domain. This cell adhesion molecule plays an important role in nervous system development, including neuronal migration and differentiation. Mutations in the gene cause X-linked neurological syndromes known as CRASH (corpus callosum hypoplasia, retardation, aphasia, spastic paraplegia and hydrocephalus). Alternative splicing of this gene results in multiple transcript variants, some of which include an alternate exon that is considered to be specific to neurons. [provided by RefSeq, May 2013]</p>