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Product datasheet for MR230899

Large2 (NM_001290773) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Large2 (NM_001290773) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Large2
Synonyms:	5730485C17Rik; AI891893; Gyltl1b; Largel; mKIAA4105
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

View online »

ORF Nucleotide Sequence:

>MR230899 representing NM_001290773
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGCCCCGAGGTCGCCCCCGGGCAATGGGGGCCGCCGTGCTGCTGCTGCTGTTGCTAGTGGTTG
GCTTCTTCCTGTTCGGCCGGGACCCGGATTATGGACTGGGCACAACTGCTACCCTCGATGAAGACCCGTA
CAGGAGTCGCAACCTCTCCGCCTCCAGCCCGCAGCTTCTACTGCCACCCAAGTGCGAGGTAATGTTGCAT
GTGGCTATCGTGTGTGCGGGATACAACTCCAGCCGAGAGATTATTACCCTAACGAAGTCCCTGCTATTCT
ACAGGAAAAATCCGCTGCACCTCCACCTGATAACTGATGCCGTAGCCAGAAACATCCTGGAGACACTCTT
CCGAACATGGATGGTGCCAGCGGTGGTGGTCAGCTTCTATGATGCGGAAGAACTCAAGCCCCTGGTCTCC
TGGATCCCCAACAAACACTACTCTGGCCTCTATGGGCTAATGAAGCTAGTACTTCCCAGCATCCTGCCTC
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AACCTCTGGAAGAACCATAGGCCCTGGCCTGCCTTGGGCAGGGGATTTAACACAGGTGTGATCCTGCTGT
GGCTGGACAGGCTCCAGCAAACTGGCTGGGAGCAGATGTGGAAGGTGACAGCCAAACGAGAGCTGCTCAC
TCTGATGGCTACTTCCTTGGCTGACCAGGACATCTTCAATGCGGTCATCAAGGAGCACCCCCATCTGGTG
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CCCAACCAGTTCCCTCCTGGGGCCGAGCAGTTGCAACAGGCCCTAACACAGCTGGATGAGGAAGAGCCCT
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ACCTCCCCAGCCTCACGATGTCACCTTGGTGGCCCAACTCTCTATGGACCGGCTGCAGATGCTGGAAGCC
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TGGCCACAGGGTCACTCATCCACAGACTATTCCCGCTGGCGGGAAGCCCAGGCACCATACAGTGTGCAGT
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ATTTGGCTGGAACAAGGTGGCCCACATCATAGAGTTGGATGCTCAGGAATATGAATTCCTGGTACTTCCT
GAGGCCTTCTCTATCCACTTGCCCCACGCTCCAAGTCTTGACATCTCCCGCTTCCGCTCCAGCCCCACCT
ACCGCAACTGTCTCCAGGCCCTCAAGGAAGAGTTCCACCAGGACTTGTCAAGGCGCTATGGGTCTGCAGC
CCTGAAATACCTCACTGCCCTGCAGCAGGCCCGAAGTCGGGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230899 representing NM_001290773
Red=Cloning site Green=Tags(s)

MLPRGRPRAMGAAVLLLLLLLVVGFFLFGRDPDYGLGTTATLDEDPYRSRNLSASSPQLLLPPKCEVMLH
VAIVCAGYNSSREIITLTKSLLFYRKNPLHLHLITDAVARNILETLFRTWMVPAVVVSFYDAEELKPLVS
WIPNKHYSGLYGLMKLVLPSILPPSLARVIVLDTDVTFSSDIVELWALFDHFSDKQVVGLVENQSDWYLG
NLWKNHRPWPALGRGFNTGVILLWLDRLQQTGWEQMWKVTAKRELLTLMATSLADQDIFNAVIKEHPHLV
HPLPCVWNVQLSDHTRAERCYLEAADLKVIHWNSPKKLRVKNKHAEFFRNLHLTFLGYDGKLLRRELFGC
PNQFPPGAEQLQQALTQLDEEEPCFEFRQQQLTVHRVHITFLPHQPPPPQPHDVTLVAQLSMDRLQMLEA
LCRHWPGPMSLALYLTDEEAQQFLHFVETSPVLSMRKDVAYHVVYRDGPLYPVNQLRNVALAQALTPYVF
LSDIDFLPAYSLYDYLRASIEQLELDSRRKTALVVPAFETLHYRFSFPNSKAELLTLLDAGSLHTFRYHE
WPQGHSSTDYSRWREAQAPYSVQWSADYEPYVVVPRDCPRYDPRFVGFGWNKVAHIIELDAQEYEFLVLP
EAFSIHLPHAPSLDISRFRSSPTYRNCLQALKEEFHQDLSRRYGSAALKYLTALQQARSRA

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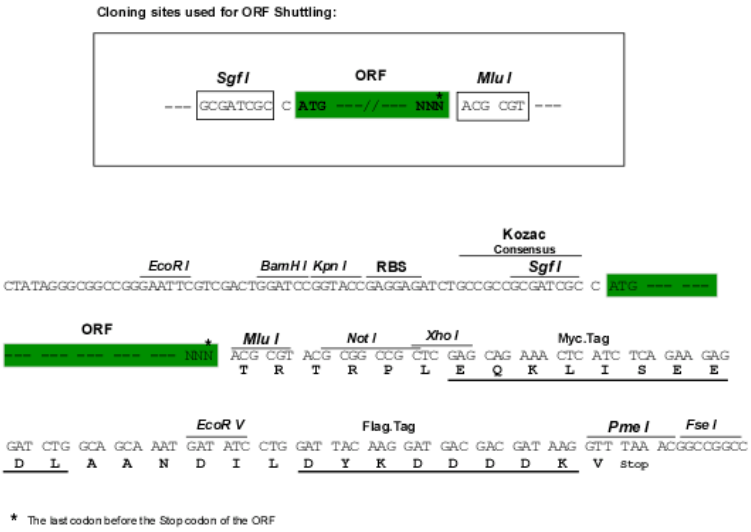
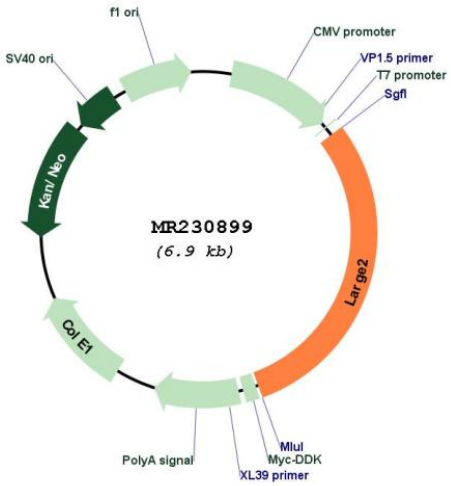
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001290773
ORF Size:	2073 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_001290773.1, NP_001277702.1
RefSeq Size:	2456 bp

RefSeq ORF:	2076 bp
Locus ID:	228366
UniProt ID:	Q5XPT3
Cytogenetics:	2 E1
MW:	80.1 kDa
Gene Summary:	Bifunctional glycosyltransferase with both xylosyltransferase and beta-1,3-glucuronyltransferase activities involved in the biosynthesis of the phosphorylated O-mannosyl trisaccharide (N-acetylgalactosamine-beta-3-N-acetylglucosamine-beta-4-(phosphate-6-)mannose), a carbohydrate structure present in alpha-dystroglycan (DAG1). Phosphorylated O-mannosyl trisaccharid is required for binding laminin G-like domain-containing extracellular proteins with high affinity. Elongates the glucuronyl-beta-1,4-xylose-beta disaccharide primer structure by adding repeating units [-3-Xylose-alpha-1,3-GlcA-beta-1-] to produce a heteropolysaccharide. Has a higher activity toward alpha-dystroglycan than LARGE (PubMed:15958417).[UniProtKB/Swiss-Prot Function]