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Product datasheet for MR210059

Large2 (NM_172670) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Large2 (NM_172670) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Large2
Synonyms:	5730485C17Rik; AI891893; Gyltl1b; Largel; mKIAA4105
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>MR210059 representing NM_172670
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGCCCCGAGGTCGCCCCCGGGCAATGGGGGCCGCCGTGCTGCTGCTGCTGTTGCTAGTGGTTG
GCTTCTTCCTGTTCGGCCGGGACCCGGATTATGGACTGGGCACAACTGCTACCCTCGATGAAGACCCGTA
CAGGAGTCGCAACCTCTCCGCCTCCAGCCCGCAGCTTCTACTGCCACCCAAGTGCGAGATGTTGCATGTG
GCTATCGTGTGTGCGGGATACAACTCCAGCCGAGAGATTATTACCCTAACGAAGTCCCTGCTATTCTACA
GGAAAAATCCGCTGCACCTCCACCTGATAACTGATGCCGTAGCCAGAAACATCCTGGAGACACTCTTCCG
AACATGGATGGTGCCAGCGGTGGTGGTCAGCTTCTATGATGCGGAAGAACTCAAGCCCCTGGTCTCCTGG
ATCCCCAACAAACACTACTCTGGCCTCTATGGGCTAATGAAGCTAGTACTTCCCAGCATCCTGCCTCCCA
GCCTGGCCCGAGTCATCGTCCTGGATACCGACGTCACTTTCTCCTCTGACATTGTGGAGCTCTGGGCACT
CTTTGATCATTTTTCTGACAAGCAGGTGGTCGGTCTCGTGGAGAACCAGAGCGACTGGTACCTGGGCAAC
CTCTGGAAGAACCATAGGCCCTGGCCTGCCTTGGGCAGGGGATTTAACACAGGTGTGATCCTGCTGTGGC
TGGACAGGCTCCAGCAAACTGGCTGGGAGCAGATGTGGAAGGTGACAGCCAAACGAGAGCTGCTCACTCT
GATGGCTACTTCCTTGGCTGACCAGGACATCTTCAATGCGGTCATCAAGGAGCACCCCCATCTGGTGCAC
CCCCTGCCCTGTGTCTGGAACGTGCAGCTGTCAGACCACACTCGGGCTGAGCGCTGCTACCTGGAAGCAG
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CCGTAATCTGCACTTGACCTTTCTGGGGTATGATGGGAAGCTACTGCGAAGAGAGCTCTTTGGATGCCCC
AACCAGTTCCCTCCTGGGGCCGAGCAGTTGCAACAGGCCCTAACACAGCTGGATGAGGAAGAGCCCTGCT
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CCACAGGGTCACTCATCCACAGACTATTCCCGCTGGCGGGAAGCCCAGGCACCATACAGTGTGCAGTGGT
CAGCTGACTATGAACCCTACGTGGTGGTACCCCGTGACTGCCCCCGTTATGATCCTCGCTTTGTGGGATT
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GCCTTCTCTATCCACTTGCCCCACGCTCCAAGTCTTGACATCTCCCGCTTCCGCTCCAGCCCCACCTACC
GCAACTGTCTCCAGGCCCTCAAGGAAGAGTTCCACCAGGACTTGTCAAGGCGCTATGGGTCTGCAGCCCT
GAAATACCTCACTGCCCTGCAGCAGGCCCGAAGTCGGGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR210059 representing NM_172670
Red=Cloning site Green=Tags(s)

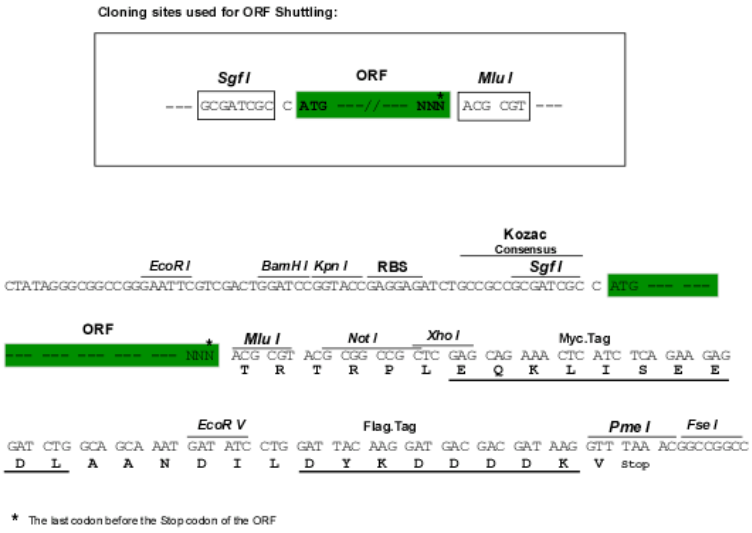
MLPRGRPRAMGAAVLLLLLLLVVGFFLFGRDPDYGLGTTATLDEDPYRSRNLSASSPQLLLPPKCEMLHV
AIVCAGYNSSREIITLTKSLLFYRKNPLHLHLITDAVARNILETLFRTWMVPAVVVSFYDAEELKPLVSW
IPNKHYSGLYGLMKLVLPSILPPSLARVIVLDTDVTFSSDIVELWALFDHFSDKQVVGLVENQSDWYLGN
LWKNHRPWPALGRGFNTGVILLWLDRLQQTGWEQMWKVTAKRELLTLMATSLADQDIFNAVIKEHPHLVH
PLPCVWNVQLSDHTRAERCYLEAADLKVIHWNSPKKLRVKNKHAEFFRNLHLTFLGYDGKLLRRELFGCP
NQFPPGAEQLQQALTQLDEEEPCFEFRQQQLTVHRVHITFLPHQPPPPQPHDVTLVAQLSMDRLQMLEAL
CRHWPGPMSLALYLTDEEAQQFLHFVETSPVLSMRKDVAYHVVYRDGPLYPVNQLRNVALAQALTPYVFL
SDIDFLPAYSLYDYLRASIEQLELDSRRKTALVVPAFETLHYRFSFPNSKAELLTLLDAGSLHTFRYHEW
PQGHSSTDYSRWREAQAPYSVQWSADYEPYVVVPRDCPRYDPRFVGFGWNKVAHIIELDAQEYEFLVLPE
AFSIHLPHAPSLDISRFRSSPTYRNCLQALKEEFHQDLSRRYGSAALKYLTALQQARSRA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9027_g06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_172670

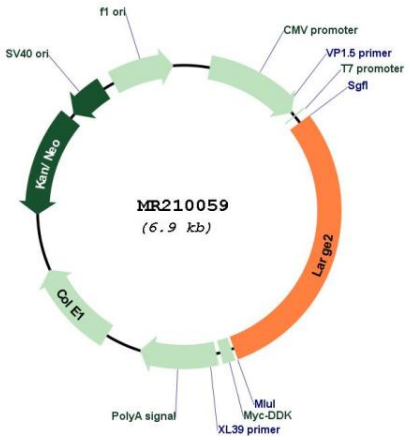
ORF Size: 2070 bp

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_172670.3, NP_766258.2
RefSeq Size:	2424 bp
RefSeq ORF:	2073 bp
Locus ID:	228366
UniProt ID:	Q5XPT3
Cytogenetics:	2 E1
MW:	80 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]

Product images:



Circular map for MR210059