

Product datasheet for **MR230735**

Large2 (NM_001290774) Mouse Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Large2 (NM_001290774) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Large2 |
| Synonyms: | 5730485C17Rik; AI891893; Gylt11b; Largel; mKIAA4105 |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |



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ORF Nucleotide Sequence:

>MR230735 representing NM_001290774
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACTGGGCACAACCTGCTACCCTCGATGAAGACCCGTACAGGAGTCGCAACCTCTCCGCCTCCAGCCC
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 TAGTACTTCCCAGCATCCTGCCTCCCAGCCTGGCCCGAGTCATCGTCTGGATACCGACGTCACCTTCTC
 CTCTGACATTGTGGAGCTCTGGGCACTCTTTGATCATTCTTCTGACAAGCAGGTGGTGGTCTCGTGGAG
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 GGGCTGAGCGCTGCTACCTGGAAGCAGCTGACCTCAAAGTGATCCACTGGAATTCACAAAGAAGCTTCG
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 CCGTTATGATCCTCGCTTTGTGGGATTTGGCTGGAACAAGGTGGCCACATCATAGAGTTGGATGCTCAG
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 GTCAGGGCGTATGGGTCTGCAGCCCTGAAATACCTCACTGCCCTGCAGCAGGCCGAAGTGGGGC

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Protein Sequence:

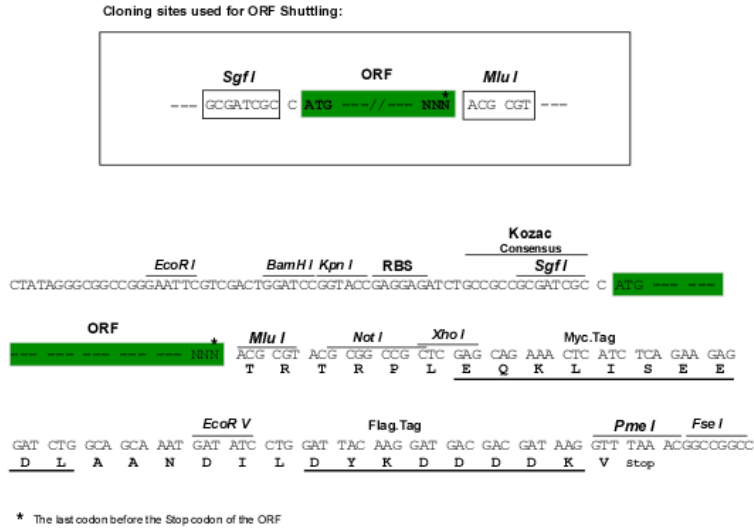
>MR230735 representing NM_001290774
 Red=Cloning site Green=Tags(s)

MDWAQLLPSMKTRTG VATSPPPARSFYCHPSARKNPLHLHLITDAVARNILETLFRTWMVPAVVVSYFYDA
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 NQSDWYLGNLWKNHRPWPALGRGFNTGVILLWLDRLQQTGWEQMWKVTAKRELLTLMATSLADQDIFNAV
 IKEHPLVHPLPCVWVNVQLSDHTRAERCYLEAADLKVIHWNSPKLRVKNKHAFFRNHLTFLGYDGK L
 LRRELF GCPNQFP PPAEQQLQAL TQLDEEPCFEFRQQQLTVHRVHITFLPHQPPPPQPHDVT LVAQLSM
 DRLQMLEALCRHWP GPM SLALYL TDEEAQQFLHFVETSPVL SMRKDVAYHVYRDGPLYPVNL RNVALA
 QALTPYVFLSDIDFLPAYSLYDYLRASIEQLELDSRRKTALVVP AFETLHYRFSFPNSKAELLTL LDAGS
 LHTRFYHEWPQHSSTDYSRWREAPYSVQWSADYEPYVVVPRDCPRYDPRFVGF GWNKVAHI IELDAQ
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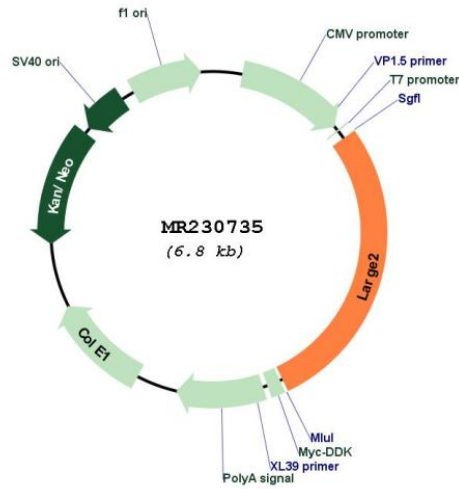
TRTRPLEQKLISEEDLAANDILDYKDDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001290774

ORF Size: 1887 bp

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| 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: | <ol style="list-style-type: none"> 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_001290774.1 , NP_001277703.1 |
| RefSeq Size: | 2370 bp |
| RefSeq ORF: | 1890 bp |
| Locus ID: | 228366 |
| UniProt ID: | Q5XPT3 |
| Cytogenetics: | 2 E1 |
| MW: | 73.2 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] |