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Product datasheet for MG224420

Lfng (NM_008494) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lfng (NM_008494) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Lfng
Synonyms:	AW061165
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG224420 representing NM_008494
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTCCAGCGGTGCGGCCGGCGCCTGCTGCTGGCGCTGGTGGGCGCGCTGTTGGCTTGTCTCCTGGTGC
TCACGGCCGACCCGCCACCGACTCCGATGCCCGCTGAGCGCGGACGGCGCGCGCTGCGTAGCCTGGCGGG
CTCCTCTGGAGGAGCTCCGGCTTCAGGGTCCAGGGCGGCTGTGGATCCCGGAGTCCTCACCCGCGAGGTG
CATAGCCTCTCCGAGTACTTCAGTCTACTCACCCGCGCGCGCAGAGACGCGGATCCACCGCCCGGGGTCG
CTTCTCGCCAGGGCGACGGCCATCCGCGTCCCCCCGCCGAAGTTCTGTCCCCTCGCGACGTCTTCATCGC
CGTCAAGACCACCAGAAAGTTTCACCGCGCGCGGCTCGATCTGCTGTTCGAGACCTGGATCTCGCGCCAC
AAGGAGATGACGTTCATCTTCACTGATGGGGAGGACGAAGCTCTGGCCAAGCTCACAGGCAATGTGGTGC
TCACCAACTGCTCCTCGGCCCACAGCCGCCAGGCTCTGTCCTGCAAGATGGCTGTGGAGTATGACCGATT
CATTGAGTCTGGGAAGAAGTGGTTCTGCCACGTGGATGATGACAACTACGTCAACCTCCGGGCGCTGCTG
CGGCTCCTGGCCAGCTATCCCCACACCCAAGACGTGTACATCGGCAAGCCCAGCCTGGACAGGCCCATCC
AGGCCACAGAACGGATCAGCGAGCACAAAGTGAGACCTGTCCACTTTTGGTTTGCCACCGGAGGAGCTGG
CTTCTGCATCAGCCGAGGGCTGGCCCTAAAGATGGGCCCATGGGCCAGTGGAGGACACTTCATGAGCACG
GCAGAGCGCATCCGGCTCCCCGATGACTGCACCATTGGCTACATTGTAGAGGCTCTGCTGGGTGTACCCC
TCATCCGGAGCGGCCTCTTCCACTCCCACCTAGAGAACCTGCAGCAGGTGCCCACCACCGAGCTTCATGA
GCAGGTGACCCTGAGCTATGGCATGTTTGAGAACAAGCGGAACGCAGTGCACATCAAGGGACCATTCTCT
GTGGAAGCTGACCCATCCAGGTTCCGCTCTGTCCATTGCCACCTGTACCCAGACACACCCTGGTGTCCTC
GCTCCGCCATCTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

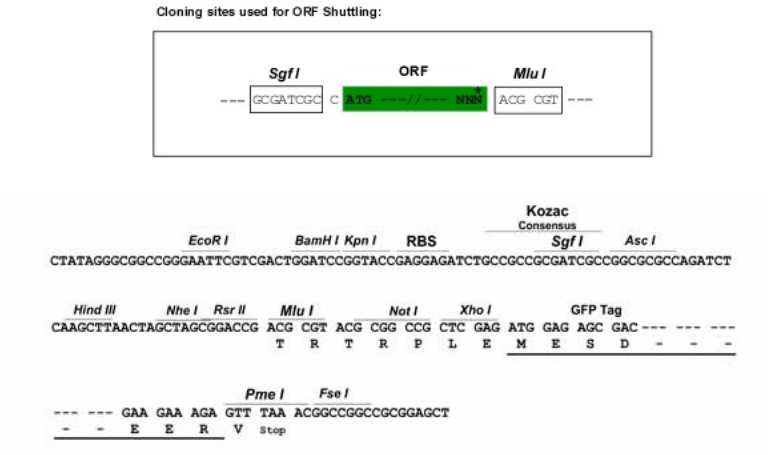
>MG224420 representing NM_008494
Red=Cloning site Green=Tags(s)

MLQRCGRRLLLALVGALLACLLVLTADPPPTPMPAERGRRALRSLAGSSGGAPASGSRAAVDPGVLTREV
HSLSEYFSLLTRARRDADPPPGVASRQGDGHPRPPAEVLSPRDVFIAVKTTRKFHRARLDLLFETWISRH
KEMTFIFTDGEDEALAKLTGNVVLTNCSSAHSRQALSCKMAVEYDRFIESGKKWFCHVDDDNYVNLRALL
RLLASYPHTQDVYIGKPSLDRPIQATERISEHKVRPVHFWFATGGAGFCISRGLALKMGPWASGGHFMST
AERIRLPDDCTIGYIVEALLGVPLIRSGLFHSHLENLQQVPTTELHEQVTLSYGMFENKRNAVHIKGPFS
VEADPSRFRSVHCHLYPDTPWCPRSAIF

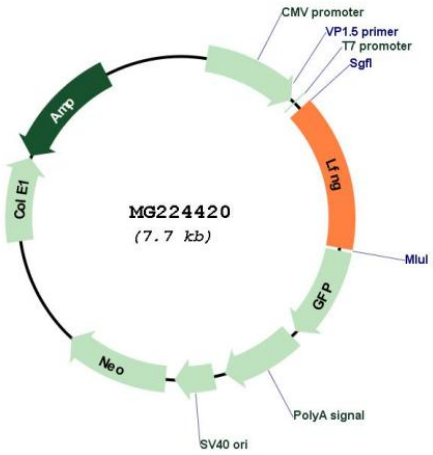
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_008494

ORF Size:	1134 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_008494.3, NP_032520.1
RefSeq Size:	2299 bp
RefSeq ORF:	1137 bp
Locus ID:	16848
UniProt ID:	O09010
Cytogenetics:	5 79.15 cM
Gene Summary:	Glycosyltransferase that initiates the elongation of O-linked fucose residues attached to EGF-like repeats in the extracellular domain of Notch molecules. Modulates NOTCH1 activity by modifying O-fucose residues at specific EGF-like domains resulting in inhibition of NOTCH1 activation by JAG1 and enhancement of NOTCH1 activation by DLL1 via an increase in its binding to DLL1 (PubMed:28089369). Decreases the binding of JAG1 to NOTCH2 but not that of DLL1 (By similarity). Essential mediator of somite segmentation and patterning. During somite boundary formation, it restricts Notch activity in the presomitic mesoderm to a boundary-forming territory in the posterior half of the prospective somite. In this region, Notch function activates a set of genes that are involved in boundary formation and in anterior-posterior somite identity (PubMed:10330372). Ectopically expressed in the thymus, Lfgn inhibits Notch signaling which results in inhibition of T-cell commitment and promotes B-cell development in lymphoid progenitors (PubMed:11520458). May play a role in boundary formation of the enamel knot (PubMed:12167404).[UniProtKB/Swiss-Prot Function]