

Product datasheet for **RG229769**

Lunatic Fringe (LFNG) (NM_002304) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Lunatic Fringe (LFNG) (NM_002304) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: LFNG
Synonyms: SCDO3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG229769 representing NM_002304
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACACCAGGTCGCTGCTGTCTTGCGGCTGACATTCAGGTAGAGACGTTTCATCTTCACTGACGGGGAAG
ATGAGGCCCTGGCCAGGCACACGGCAACGTGGTCATCACAACGCTCGGCCGCCACAGCCGCCAGGC
GCTGTCTGCAAGATGGCCGTGGAGTATGACCGCTTCATCGAGTCCGGCAGGAAGTGGTTCTGCCACGTG
GACGATGACAACACGTCAACCTGCGGGCCCTGCTGCGGCTGCTGGCCAGCTACCCGCACACGCGGGACG
TCTACGTCGGCAAGCCCAGCCTGGACAGGCCCATCCAGGCCATGGAGCGGGTACGCGAGAACAAGGTGCG
TCCTGTCCAATTCTGGTTTGCCACGGGGCGCGCTGGCTTCTGCATCAGCCGTGGGCTGGCTCTGAAGATG
AGCCCGTGGGCCAGCGGGGGTCACTTCATGAATACGGCTGAGCGGATCCGGCTGCCTGATGACTGCACCA
TCGGCTACATCGTGGAGGCCCTGCTGGGTGTGCCCTCATCCGCAGCGGCCTCTTCCACTCCCACCTGGA
GAACCTGCAGCAGGTGCCACCTCGGAGCTCCACGAGCAGGTGACGCTGAGCTACGGTATGTTTTGAAAC
AAGCGAACCGCGTCCACGTGAAGGGCCCTTCTCGGTGGAGGCCGACCCATCCAGGTTCCGCTCCATCC
ACTGCCACCTGTACCCGGACACACCCTGGTGTCCCCGCACTGCCATCTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG229769 representing NM_002304
 Red=Cloning site Green=Tags(s)

MTPGRCCLAADIQVETFIIFDGEDEALARHTGNVITNCSAAHSRQALSCKMAVEYDRFIESGRKWFCHV
 DDDNYVNLRALRLLLASYPHTRDYYVVGKPSLDRPIQAMERVSENKVRPVHFWFATGGAGFCISRGLALKM
 SPWASGGHFMNTAERIRLPDDCTIGYIVEALLGVPLIRSGLFHSHLENLQQVPTSELHEQVTLSYGMFEN
 KRNAVHVKGPFVSEADPSRFRSIRHCHLYPDTPWCPRTAIF

TRTRPLE - GFP Tag - V

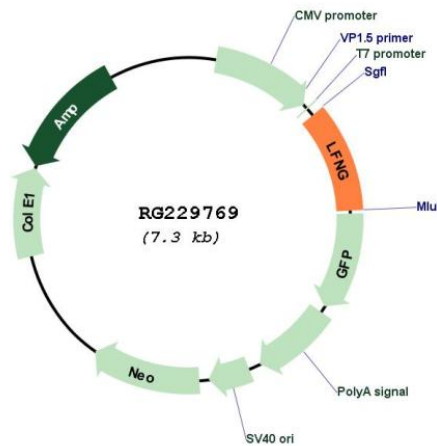
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_002304

ORF Size: 750 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:	<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_002304.2 , NP_002295.1
RefSeq Size:	2068 bp
RefSeq ORF:	753 bp
Locus ID:	3955
UniProt ID:	Q8NES3
Cytogenetics:	7p22.3
Protein Families:	Transmembrane
Protein Pathways:	Notch signaling pathway
Gene Summary:	<p>This gene is a member of the glycosyltransferase 31 gene family. Members of this gene family, which also includes the MFNG (GeneID: 4242) and RFNG (GeneID: 5986) genes, encode evolutionarily conserved glycosyltransferases that act in the Notch signaling pathway to define boundaries during embryonic development. While their genomic structure is distinct from other glycosyltransferases, these proteins have a fucose-specific beta-1,3-N-acetylglucosaminyltransferase activity that leads to elongation of O-linked fucose residues on Notch, which alters Notch signaling. The protein encoded by this gene is predicted to be a single-pass type II Golgi membrane protein but it may also be secreted and proteolytically processed like the related proteins in mouse and Drosophila (PMID: 9187150). Mutations in this gene have been associated with autosomal recessive spondylocostal dysostosis 3. [provided by RefSeq, May 2018]</p>