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Product datasheet for RC229861

Lunatic Fringe (LFNG) (NM_001166355) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lunatic Fringe (LFNG) (NM_001166355) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lunatic Fringe
Synonyms:	SCDO3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC229861 representing NM_001166355
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATGAACAGACAGGAAGGCTCAGGCTGGACACGTATTGTATGAGTGCCAAGCAGATCTGGGCATGGA
GCAAATGCTCAGGAAGGCTGTGGGATGAGCACATGAAATGGATGGAAGGATGGACGGACAGATGGACAGA
TGGATGGATGGATGGATGGATGAGTGGAGCCCAACACCAGCTCTCAGGTCCTACGGAGGTGGCCTC
TCTCAGCAGACGTTCATCTTCACTGACGGGGAAGATGAGGCCCTGGCCAGGCACACGGGCAACGTGGTCA
TCACAAACTGCTCGGCCGCCCACAGCCGCCAGGCGCTGTCCTGCAAGATGGCCGTGGAGTATGACCGCTT
CATCGAGTCCGGCAGGAAGTGGTTCTGCCACGTGGACGATGACAACTACGTCAACCTGCGGGCCCTGCTG
CGGCTGCTGGCCAGCTACCCGCACACGCGGGACGTCTACGTCGGCAAGCCCAGCCTGGACAGGCCCATCC
AGGCCATGGAGCGGGTCAGCGAGAACAAGGTGCGTCCTGTCCACTTCTGGTTTGCCACGGGCGGCGCTGG
CTTCTGCATCAGCCGTGGGCTGGCTCTGAAGATGAGCCCGTGGGCCAGCGGGGGTCACTTCATGAATACG
GCTGAGCGGATCCGGCTGCCTGATGACTGCACCATCGGCTACATCGTGGAGGCCCTGCTGGGTGTGCCCC
TCATCCGCAGCGGCCTCTTCCACTCCCACCTGGAGAACCTGCAGCAGGTGCCCACCTCGGAGCTCCACGA
GCAGGTGACGCTGAGCTACGGTATGTTTGAAAACAAGCGGAACGCCGTCCACGTGAAGGGGCCCTTCTCG
GTGGAGGCCGACCCATCCAGGTTCCGCTCCATCCACTGCCACCTGTACCCGGACACACCCTGGTGTCCCC
GCACTGCCATCTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC229861 representing NM_001166355
Red=Cloning site Green=Tags(s)

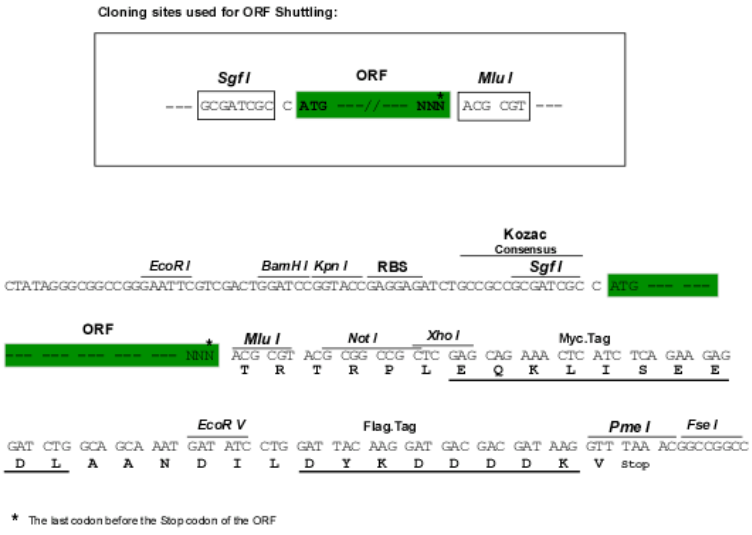
MDEQTGRLRLDTYCMSAKQIWAWSKCSGRLWDEHMKWMEGWTDRWTDGWMDGWMDEWSPTPALRSYGGGL
SQQTFIFTDGEDEALARHTGNVVITNCSAAHSRQALSCKMAVEYDRFIESGRKWFCHVDDDNYVNLRALL
RLLASYPHTRDVYVGKPSLDRPIQAMERVSENKVRPVHFWFATGGAGFCISRGLALKMSPWASGGHFMNT
AERIRLPDDCTIGYIVEALLGVPLIRSGLFHSHLENLQQVPTSELHEQVTLSYGMFENKRNAVHVKGPFS
VEADPSRFRSIHCHLYPDTPWCPRTAIF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8052_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001166355

ORF Size: 924 bp

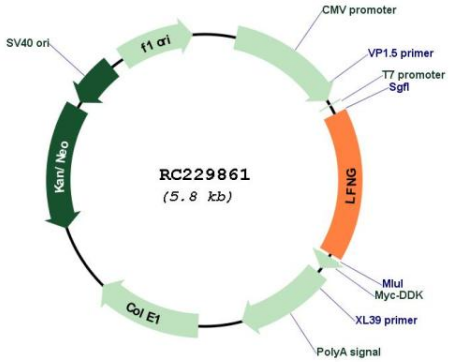
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

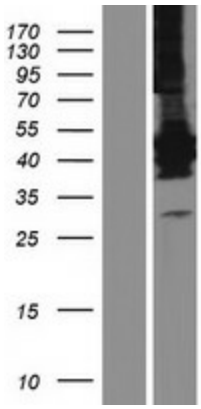
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_001166355.1, NP_001159827.1
RefSeq ORF:	927 bp
Locus ID:	3955
UniProt ID:	Q8NES3
Cytogenetics:	7p22.3
Protein Families:	Transmembrane
Protein Pathways:	Notch signaling pathway
MW:	35.7 kDa
Gene Summary:	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]

Product images:



Circular map for RC229861



Western blot validation of overexpression lysate (Cat# [LY432861]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229861 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).