

## **Product datasheet for SC328407**

## OriGene Technologies, Inc.

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## Lunatic Fringe (LFNG) (NM\_002304) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Lunatic Fringe (LFNG) (NM 002304) Human Untagged Clone

Tag: Tag Free

Symbol: Lunatic Fringe

Synonyms: SCDO3

Mammalian Cell

None

Selection:

Vector:

pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM\_002304, the custom clone sequence may differ by one or more

nucleotides

ACACCCTGGTGTCCCCGCACTGCCATCTTCTAG

**Restriction Sites:** Please inquire **ACCN:** NM 002304

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



## Lunatic Fringe (LFNG) (NM\_002304) Human Untagged Clone - SC328407

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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: <u>NM 002304.2</u>, <u>NP 002295.1</u>

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:** 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]

Transcript Variant: This variant (4) has multiple differences, compared to variant 1. These differences result in a distinct 5' UTR and cause translation initiation at an alternate start codon, compared to variant 1. The encoded protein (isoform d) has a shorter and distinct N-

terminus, compared to isoform 1.