

Product datasheet for **MG224646**

Lgr6 (NM_001033409) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lgr6 (NM_001033409) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Lgr6
Synonyms:	A530037C04Rik; D830026M09
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG224646 representing NM_001033409
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCACAGCCCGCTGGGCTCTGGCGCTGTGGCTTTGCGCTGTGCTGTGCGCATCGGCGCGGGGGCA
 GCGACCCCGAGCCTGGCCCGGGCGTCCCCTGCGCTCCCTGCCACTGCCAGGAGGACGGCATCAT
 GCTGTCCGCTGACTGCTCCGAGCTCGGGCTCTCAGTGGTGCCTGCGGACCTGGACCCCTGACGGCTTAC
 CTAGACCTCAGTATGAACAACCTCACGGAGCTTACCCGGGTCTCTTCCACCACCTGCGCTTCTGGAGG
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 CCTCTCTGCAGACAATACATTTTATGACAACCCAATCCAGTTTGTGGGAAGGTGAGCATTCCAGTACC
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 GCCCTCTGGCTCTCTTTGCCCTCACTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG224646 representing NM_001033409
 Red=Cloning site Green=Tags(s)

MHSPPGLLALWLCVLCASARGGSDPQPGRPACAPCHCQEDGIMLSADCELGLSVVPADLDPLTAY
 LDLSMNNLTELQPLFHHLRFLEELRLSGNHLSHIPGQAFSGLHSLKILMLQSNQLRGIPAEALWELPSL
 QSLRLDANLISLVPERSFEGLSSLRHLWLDNALTEIPVRALNNLPAQAMTLALNHIRHIPDYAFQNL
 SLVVLHLHNNRIQHVGTSHFEGHLNLETLDLNYNELQEFLAIRTLGRLQELGFHNNNIKAPEKAFMGN
 PLLQTIHFYDNP IQFVGRSAFQYLSKLHTLSLNGATDIQEFPDLKGTTSLEILTLTRAGIRLLPPGVCQQ
 LPRLRIEELSHNQIEELPSLHRCQKLEEI GLRHNRIKEIGADTFSQLGSLQALDLSWNAIRAIHPEAFST
 LRSLVKLDLTDNQLTTLPLAGLGGLMHLKLGNLALSQAFSKDSFPKLRILEVPYAYQCCAYGICASFFK
 TSGQWQAEDFHPEEEEEAPKRPLGLLAGQAENHYDLDELQMGTEDESKPNPSVQCSPVPGPFKPEHLFE
 SWGIRLAVWAI VLLSVLCNGLVLLTVFASGPSPLSPVKLVVGAMAGANALTGISGLLASVDALTYGQFA
 EYGARWESGLGCQATGLAVLGSEASVLLLTLAAVQCSI SVTCV RAYGKAPSPGVRAGALGCLALAGLA
 AALPLASVGEYGASPLCLPYAPPEGRPAALGFAVALVMMNSLCFLV VAGAYIKLYCDLPRGDFEAVWDC
 MVRHVAVLIFADGLLYCPVAFLSFASMLGLFPVTPEAVKSVLLVVLPLPACLNPLLYLLFNPHFRDDLRR
 LWSPRSPGPLAYAAAGELEKSSCDSTQALVAFSDVDLILEASEAGQPPGLETYGFPSVTLISRHPGAT
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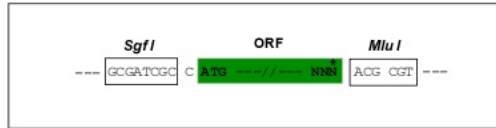
TRTRPLE – GFP Tag – V

Restriction Sites:

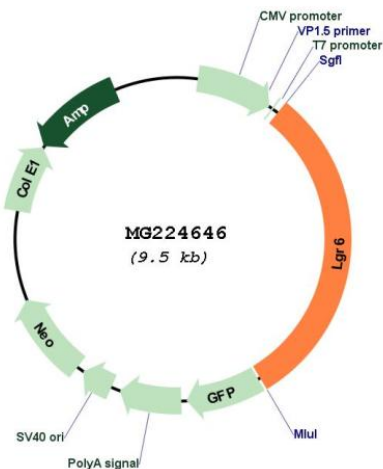
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001033409

ORF Size: 2901 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_001033409.3](#), [NP_001028581.1](#)

RefSeq Size: 3623 bp

RefSeq ORF: 2904 bp

Locus ID: 329252

UniProt ID: [Q3UVD5](#)

Cytogenetics: 1 E4

Gene Summary: Receptor for R-spondins that potentiates the canonical Wnt signaling pathway and acts as a marker of multipotent stem cells in the epidermis. Upon binding to R-spondins (RSPO1, RSPO2, RSPO3 or RSPO4), associates with phosphorylated LRP6 and frizzled receptors that are activated by extracellular Wnt receptors, triggering the canonical Wnt signaling pathway to increase expression of target genes. In contrast to classical G-protein coupled receptors, does not activate heterotrimeric G-proteins to transduce the signal (By similarity).
[UniProtKB/Swiss-Prot Function]