

## Product datasheet for **RC239730**

### LGR5 (NM\_001277226) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LGR5 (NM_001277226) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LGR5
Synonyms:	FEX; GPR49; GPR67; GRP49; HG38
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC239730 representing NM\_001277226  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGACACCTCCCGGCTCGGTGTGCTCCTGTCTTGCCTGTGCTGCTGCAGCTGGCGACCGGGGACAGT  
 CCCCCAGGTCTGGTGTGTTGCTGAGGGGCTGCCCCACACACTGTATTGCGAGCCCGACGGCAGGATGTT  
 GCTCAGGGTGGACTGCTCCGACCTGGGGCTCTCGGAGCTGCCTTCCAACCTCAGCGTCTTACCTCTAC  
 CTAGACCTCAGTATGAACAACATCAGTCAGCTGCTCCGAATCCCCTGCCAGTCTCCGCTTCTGGAGG  
 AGTTACGTCTTGGCGGAAACGCTCTGACATACATTCCCAAGGGAGCATTCACTGGCCTTACAGTCTTAA  
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 CAATCCCTGCGTCTGGATGCTAACCACATCAGCTATGTGCCCAAGCTGTTTCAGTGGCCTGCATTCCC  
 TGAGGCACCTGTGGCTGGATGACAATGCGTTAACAGAAAATCCCCGTCCAGGCTTTTAGAAGTTTATCGGC  
 ATTGCAAGCCATGACCTTGGCCCTGAACAAAATACACCACATACCAGACTATGCCTTTGGAAACCTCTCC  
 AGCTTGGTAGTTCTACATCTCCATAACAATAGAATCCACTCCCTGGGAAAGAAATGCTTTGATGGGTCC  
 ACAGCCTAGAGACTTTAGATTTAAATTACAATAACCTTGATGAATCCCCACTGCAATTAGGACACTCTC  
 CAACCTTAAAGAACTACATTTCTATGACAATCCATCCAGTTTGTGGGAGATCTGCTTTTCAACATTTA  
 CCTGAACATAAGAACACTGACTCTGAATGGTGCCTCACAAAATACTGAATTTCTGATTTAACTGGAAGT  
 CAAACCTGGAGAGTCTGACTTTAACTGGAGCACAGATCTCATCTTCTCAAACCGTCTGCAATCAGTT  
 ACCTAATCTCAAAGTCTAGATCTGTCTTACAACCTATTAGAAGTTTACCCAGTTTTTCACTGCTGCCAA  
 AAGCTTCAGAAAATTGACCTAAGACATAATGAAATCTACGAAATTAAGTTGACACTTTCCAGCAGTTGC  
 TTAGCCTCCGATCGTGAATTTGGCTTGAACAAAATTTGCTATTATTCACCCCAATGCATTTTCCACTTT  
 GCCATCCCTAATAAAGCTGGACCTATCGTCCAACCTCCTGTCGTCTTTTCTATAACTGGGTACATGGT  
 TTAACCTACTTAAAATTAACAGGAAATCATGCCTTACAGAGCTTGATATCATCTGAAAATTTCCAGAAC  
 TCAAGGTATAGAAATGCCTTATGCTTACCAGTCTGTGCATTTGGAGTGTGAGAATGCCTATAAGAT  
 TTCTAATCAATGGAATAAAGGTGACAACAGCAGTATGGACGACCTTCATAAGAAAGATGTGGAATGTTT  
 CAGGCTCAAGATGAACGTGACCTTGAAGATTTCTGCTGACTTTGAGGAAGACCTGAAAGCCCTTCAAT  
 CAGTGCAGTGTTACCTTCCCCAGGCCCTTCAAACCTGTGAACACCTGCTTATGGCTGGCTGATCAG  
 AATTGGAGTGTGGACCATAGCAGTCTGGCACTTACTTGAATGCTTTGGTACTTCAACAGTTTTCAGA  
 TCCCTCTGTACATTTCCCCATTAACCTGTTAATTGGGGTCATCGCAGCAGTGAACATGCTCACGGGAG  
 TCTCCAGTGCCGTGCTGGCTGGTGTGGATGCGTTCACTTTTGGCAGCTTTCACGACATGGTGCCTGGTG  
 GGAGAATGGGGTTGGTTGCCATGTCATTGGTTTTTTGTCCATTTTGTCTCAGAATCATCTGTTTTCTG  
 CTTACTCTGGCAGCCCTGGAGCGTGGGTCTCTGTGAAATATTCTGCAAAATTTGAAACGAAAGCTCCAT  
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 TACATGGTCTGCTCATCTTGTCAATTCCTTTGCTTCTCATGATGACCATTGCCTACACCAAGCTCT  
 ACTGCAATTTGGACAAGGGAGACCTGGAGAATTTGGGACTGCTCTATGGTAAAACACATTGCCCTGTT  
 GCTCTTACCAACTGCATCCTAACTGCCCTGTGGCTTTCTTGTCTTCTCTCTTTAATAAACCTTACA  
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 GACAAGATCAAAACACCAAGCTTGTGATCAATTAACCTGATGATGTCGAAAAACAGTCTGTGACTCA  
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 CAGCTTATCCAGTACTGAGAGCTGCCATCTTCTCTGTGGCATTGTGCCATGTCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239730 representing NM\_001277226  
 Red=Cloning site Green=Tags(s)

MDTSRLGVLLSLPVLLQLATGGSSPRSGVLLRGCPHCHCEPDGRMLLRVDCSDLGSELPSNLSVFTSY  
 LDLSMNNISQLLPNPLSLRFLLEELRLAGNALTYIPKGAFTGLYSLKVLMLQNNQLRHVPTEALQNLRS  
 QSLRLDANHISYVPPSCFSGLHSLRHLWDDNALTEIPVQAFRSLSALQAMTLALNKIHHIPDYAFGNLS  
 SLVVLHLHNNRIHSLGKKCFDGLHSLETLDLNYNNLDEFPTAIRTLSNLKELHFYDNP IQFVGRSAFQHL  
 PELRRTLTLNGASQITEFPDLTGANLESLLTGAQISSLPQTVCNQLPNLQVLDLSYNLLEDLPSFSVCQ  
 KLQKIDLRHNEIYEIKVDTFQQLLSLRSNLAWNKIAIHPNAFSTLPSLIKLDLSSNLLSSFPITGLHG  
 LTHLKLGTGNHALQSLISSENFPELKVIEMPYAYQCCAFGVCENAYKISNQWNGDNSSMDDLHKKDAGMF  
 QAQDERDLEDLDFEEDLKALHSVQCSPSPGPFKPEHLLDGWLRIGVWTIAVLALTCNALVTSTVFR  
 SPLYISPIKLLIGVIAAVNMLTGSSAVLAGVDAFTFGSFARHGAWWENGVGCHVIGFLSIFASESSVFL  
 LTLAALERGFVSKYSAKFKAPFSSLKVIILLCALLALTMAAVPLLGGSKYGASPLCLPLPFGEPTMG  
 YMVALILLNSLCFLMMTIAATKLYCNLDKGDLENIWDCSMVKHIALLLFTNCILNCPVAFSFSINLT  
 FISPEVIKFIILLVVVPLPACLNPLLYILFNPHFKEDLVSLRKQTYVWTRSKHPSLMSINSDDVEKQSCDS  
 TQALVTF TSSSITYDLPPSSVSPAYPVTESCHLSSVAFVPCL

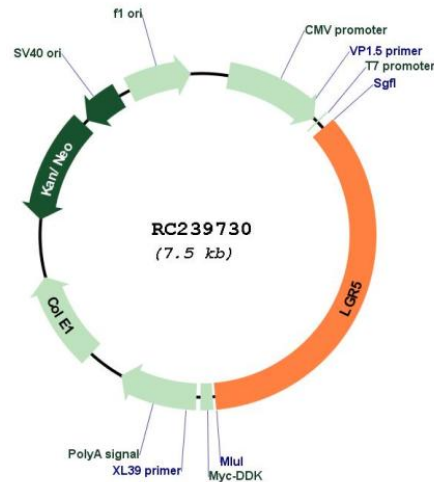
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001277226

**ORF Size:** 2649 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\\_001277226.2](#)

**RefSeq Size:** 4553 bp

**RefSeq ORF:** 2652 bp

**Locus ID:** 8549

**UniProt ID:** [O75473](#)

**Cytogenetics:** 12q21.1

**Protein Families:** Druggable Genome, GPCR, Transmembrane

**MW:** 97.9 kDa

**Gene Summary:** The protein encoded by this gene is a leucine-rich repeat-containing receptor (LGR) and member of the G protein-coupled, 7-transmembrane receptor (GPCR) superfamily. The encoded protein is a receptor for R-spondins and is involved in the canonical Wnt signaling pathway. This protein plays a role in the formation and maintenance of adult intestinal stem cells during postembryonic development. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2015]