

## Product datasheet for **RN202738**

### **Lgr5 (NM\_001106784) Rat Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Lgr5 (NM_001106784) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Lgr5
Synonyms:	Gpr49
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >RN202738 representing NM\_001106784  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGACACCTCCCGCTCCGCATGCTCCTGTCTTGTGGCGCTGCTGCAGCTGGTGGCTGCCGGCAGCC  
 CACCGAGACCGGACACGATGCCGCGGGCTGCCATCATACTGTCACTGTGAGCTGGATGGCAGGATGCT  
 GCTCAGGGTGGACTGCTCCGACCTGGGGCTCTCGGAGCTGCCCTCCAACCTCAGCGTCTTACCTCTAC  
 CTGGACCTCAGTATGAACAACATCAGTCAGCTACCTGCCAGTCTCCTGCATCGCCTCCGCTTCTAGAAG  
 AGTTGCGTCTTGTGGAAATGCTTTGACACACATCCCAAGGGAGCATTGCGAGGCTTACAGTCTCAA  
 AGTTCTCATGCTGCAGAATAACAGCTGAGACAGGTTCCGGAGGAAGCGCTACAGAACCTGAGAAGCCTT  
 CAGTCCCTGCGCTTGGATGCCAACCACATCAGCTACGTGCCACCCAGCTGTTTCAGTGGTCTGCACTCCC  
 TGAGGCACCTGTGGCTAGATGACAACGCTCTCACAGATGTCCCTGTCCAGGCTTTCAGAAGTTTATCAGC  
 CCTGCAAGCCATGACCTTGGCCCTGAACAAAATACACCACATAGCAGACCATGCCTTTGGAAACCTTCC  
 AGCCTCGTGGTTCTGCATCTCCATAATAATAGAATCCACTCCCTGGGAAAGAAATGCTTTGATGGACTCC  
 ACAGCCTGGAGACTTTAGATTTAAATTATAATAACCTTGACGAATCCCCACTGCAATCAAGACTCTC  
 CAACCTCAAGGAAGTCCACAGCAACAATATCAGATCAATACCAGAGCGAGCATTTCGTAGGCAAC  
 CCTTCTCTATCACAAATACATTTCTATGACAATCCCATCCAGTTTGTGGAAATCTCTGCTTTTCAACT  
 TGCTGAACCTAAGAACGCTGACTTTGAATGGTGCCTCGCAAACTACTGAATCCCTGACTTAACGGGGAC  
 CGCAACCTGGAGAGCCTGACTTTAACTGGAGCAAAGATCTCGTCTTCCCAAACCGTCTGTGATCAG  
 TTACCTAATCTCCAAGTCTAGATTTGTCTTACAACCTGCTCGAAGACTTACCCAGTTTGTGGGCTTTCAGCAGTT  
 AAAAGCTCAGAAAATTGACCTGGCATAATGAAATCTATGAAATTAAGGTGGCACTTTTCAGCAGTT  
 GTTCAACCTCCGATCTCTGAACCTTAGCCCGGAATAAAATGCCATTATCACCCCAACGCTTCTCTACG  
 TTGCCGCTCTAATAAAGCTGGACCTATCATCCAACCTCCTTTCGTCTTCCCTGTGACTGGGTTACACG  
 GTTAACTCACTTAAAATTAACGGGAACCGCCTTGCAGAGCCTGATACCATCTGCAAACTTCCCGGA  
 GCTCAAGATTATAGAAATGCCATACGCTTACCAGTGTGTGCAATTTGGGGGTGTGAGAATGTCTATAAA  
 ATTCTAATCAATGGAACAAAGATGACAGCAGCAGTGTGGACGACCTTCGTAAGAAAGATGCTGGCTTAT  
 TTCAAGTTCAAGATGAGCGGGACCTTGAAGACTTCTACTTGACTTTGAGGAAGACCTGAAGTTCTTCA  
 CTCGTCAGTGTCTCACCTCCCCAGTCCCTCAAGCCCTGTGAGCACCTGTTTGGTAGCTGGCTGATC  
 CGAATCGGGGTGTGGACCACAGCAGTCTGGCGCTTTCCTGCAATGCCTTGGTGGCTTTCACAGTGTCA  
 GAACCCCTCTGTACATCTTCCATAAACTGCTAATCGGGTAATTGCGGTAGTGGACATACTCATGGG  
 GGTCTCCAGTGAATTTGGCTGTGCTGGACACGTTCACTTTTGGCAGTTTGTCAACACGGTGCATGG  
 TGGGAAGTGAATTTGGCTGCCAAATGTTGGTTTTTGTCCATTTTGGTTCCGAATCATCGGTCTTCC  
 TGCTCACTCTGGCGGCACTGGAACGTGGTTTTTCTGTCAAGTGTCTTCAAAGTTTGAATGAAAGCTCC  
 CCTTCTAGCCTGAAAGCGATCATTGCTGTGTGCTCTTGGCCCTGACCATTGCCACCGTCCCCTTG  
 CTAGGAGGCAGTGAACAATGCCTCTCCCCTCGCTGCCCTTACCCTTGGGGAGCCAGCACACAG  
 GCTACATGGTGGCTCTCGTATTGCTCAACTCCCCTGTGTTTCTCATAATGACCATTGCCTATAAAGGCT  
 CTACTGCAGTTTGGAGAAGGGAGAGCTGGAGAACCTTTGGGACTGTTCTATGGTGAAGCACACTGCTCTG  
 TTGCTCTTCAACCACTGTATCCTTTACTGCCCGTGGCTTCTTATCCTTCTCCTTTTGTAAACCTCA  
 CGTTTATCAGTCCGAAGTAATTAATTTATACTTCTAGTGATTGTCCCCTTCCGGCATGCCTCAACCC  
 CCTTCTACATTGTCTTCAACCCCAATTTAAGGAGGATATGGGCAGCCTGGGAAAGCAAACCCGTTTC  
 TGGACAAGAGCAAACACCCAAGTCTGTGTCCATTAACCGGACGATGTTGAGAAACGGTCTGTGACT  
 CAACCCAAGCCTTAGTATCCTTTACCCACGCCAGCATAGCCTATGACTTGCCTTCCGATTCCGGGTATC  
 ACCAGTTACCCAATGACTGAAAGCTGTACCTCTCTTCAGTTGCATTTGCCATGTCT**CTAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2589\\_c02.zip](https://cdn.origene.com/chromatograms/ja2589_c02.zip)

**Restriction Sites:** SgfI-MluI

<b>ACCN:</b>	NM_001106784
<b>Insert Size:</b>	2724 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_001106784.1</a></u> , <u><a href="#">NP_001100254.1</a></u>
<b>RefSeq Size:</b>	3130 bp
<b>RefSeq ORF:</b>	2724 bp
<b>Locus ID:</b>	299802
<b>UniProt ID:</b>	<u><a href="#">D4AC13</a></u>
<b>Cytogenetics:</b>	7q22
<b>Gene Summary:</b>	<p>Receptor for R-spondins that potentiates the canonical Wnt signaling pathway and acts as a stem cell marker of the intestinal epithelium and the hair follicle. 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. Involved in the development and/or maintenance of the adult intestinal stem cells during postembryonic development (By similarity).[UniProtKB/Swiss-Prot Function]</p>