

Product datasheet for **RC211338**

LGR7 (RXFP1) (NM_021634) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LGR7 (RXFP1) (NM_021634) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LGR7
Synonyms:	LGR7; RXFPR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC211338 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACATCTGGTTCTGTCTTCTTCTACATCTTAATTTTTGGAAAAATTTTTCTCATGGGGTGGACAGG
 ATGTCAAGTGCTCCCTTGCTATTTCCCTGTGGGAACATCACAAAGTGCTTGCCTCAGCTCCTGCACTG
 TAACGGTGTGGACGACTGCGGGAATCAGGCCGATGAGGACAACCTGTGGAGACAACAATGGATGGTCTCTG
 CAATTTGACAAAATTTTTGCCAGTTACTACAAAATGACTTCCCAATATCCTTTTGAGGCAGAAAACCTG
 AATGTTTGGTCGGTTCTGTGCCAGTGCAATGTCTTTGCCAAGTCTGGAGCTTGACTGTGATGAAACCAA
 TTTACGAGCTGTTCCATCGTTTTCTCAAATGTGACTGCAATGCACTTCAGTGGAACTTAATAAGAAAG
 CTTCTCTGATTGCTTCAAGAATTATCATGATCTTCAGAAGCTGTACCTGCAAAAACAATAAGATTACAT
 CCATCTCCATCTATGCTTTCAGAGGACTGAATAGCCTTACTAACTGTATCTCAGTCATAACAGAATAAC
 CTTCTGAAGCCGGGTGTTTTTGAAGATCTTCACAGACTAGAATGGCTGATAATTGAAGATAATCACCTC
 AGTCGAATTTCCCAACCAACATTTTATGGACTAAATTCTTTATCTTATCTTATCTTATCTTATCTTATCTT
 TCACCCGTTTACCTGATAAACCTCTCTGTCAACACATGCCAAGACTACATTGGCTGGACCTTGAAGGCAA
 CCATATCCATAATTTAAGAAATTTGACTTTTATTTCTGACAGTAATTTAACTGTTTTAGTGATGAGGAAA
 AACAAAATTAATCACTTAAATGAAAATACTTTTGACCTCTCCAGAACTGGATGAATTGGATTTAGGAA
 GTAATAAGATTGAAAATCTTCCACCGCTTATATCAAGGACCTGAAGGAGCTGTCACAATTGAATCTTTC
 CTATAATCCAATCCAGAAAATCAAGCAAACCAATTTGATTATCTTGTCAAACCTCAAGTCTCTCAGCCTA
 GAAGGGATTGAAATTTCAAATATCCAACAAAGGATGTTTAGACCTTATGAATCTCTCACATATATT
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 GTTTCGTGGAGAATAACAATAAGCATGCGCAGCTGTGGATGGAGAGTACTCATTGTCAGCTTGAGGATCT
 TTGGCCATTCTGTCCACAGAAGTATCAGTTTTACTGTTAACATTTCTGACATTGGAAAAATACATCTGCA
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 TTCTTGGTATTAATTTGGCCGATTTATCATCATAGTTTTTCCATGGAAGCATGTTTTATAGTGTTC
 TCAAAGTGCCATAACAGCAACTGAAATACGGAATCAAGTTAAAAAAGAGATGATCCTTGCCAAACGTTTT
 TTCTTTATAGTATTTACTGATGCATTATGCTGGATACCCATTTTTGTAGTGAAATTTCTTCACTGCTTC
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 CCCAATTTCTATACTCTGACCACAAGACCATTTAAAGAAATGATTCATCGGTTTTGGTATAACTACAGA
 CAAAGAAAATCTATGGACAGCAAAGGTCAGAAAACATATGCTCCATCATTATCTGGGTGGAAATGTGGC
 CACTGCAGGAGATGCCACCTGAGTTAATGAAGCCGGACCTTTTCATACCCCTGTGAAATGTCACTGAT
 TTCTCAATCAACGAGACTCAATTCCTATTCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211338 protein sequence
Red=Cloning site Green=Tags(s)

MTSGSVFFYILIFGKYFSHGGGQDVKCSLGYFPCGNITKCLPQLLHCNGVDDCGNQADEDCGDNNGWSL
 QFDKYFASYKMTSQYPFEAETPECLVGSVPVQCLCQGLELDCDETNLRAVPSVSSNVTAMSLQWNLIRK
 LPPDCFKNYHDLQKLYLQNNKITSISYAFRGLNSLTKLYLSHNRITFLKPGVFEDLHRLLEWLIIEDNHL
 SRI SPPTFYGLNSLILLVLMNNVLRTPDKPLCQHMPRLHWLDLEGNIHNLRLNLFISCSNLTVLVMRK
 NKINHLNENTFAPLQKLDELDLGSKNIENLPPLIFKDLKELSQLNLSYNP IQKI QANQFDYLVKLSL
 EGIEISNIQQRMFRLMNL SHIYFKKFQYCGYAPHVRSCKPNTDGISSLENLLASIIQRVFWVVSATC
 FGNIFVICMRPYIRSENKLYAMSIISLCCADCLMGIYLFVIGGFDLFRGEYNKHAQLWMESTHCQLVGS
 LAILESTEVSLLL TFLTEKYICIVYFRCVPRGKCRITIVLIL IWITGFIVAFIPLSNKEFFKNYYGTN
 GVCFLPHSEDTESIGAQIYSVAIFLGINLAAFIIIVFSYGSFMFYSVHQSATATEIRNQVKKEMILAKRF
 FFIVFTDALCWIPFVVKFLLQVEIPGTITSWVVFILPINSALNPILYTLTTRPFKEMIHRFWYNYR
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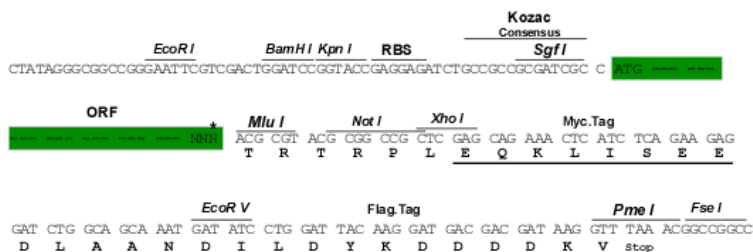
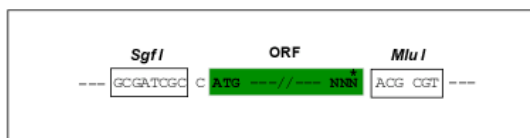
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6010_a02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_021634

ORF Size: 2271 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_021634.4](#)

RefSeq Size: 3874 bp

RefSeq ORF: 2274 bp

Locus ID: 59350

UniProt ID: [Q9HBX9](#)

Cytogenetics: 4q32.1

Domains: 7tm_1, LRR, Idl_recept_a, LRR_TYP, LRR_SD22, LRR_PS

Protein Families: Druggable Genome, GPCR, Transmembrane

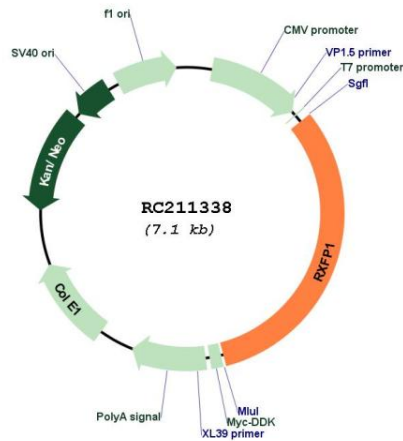
Protein Pathways: Neuroactive ligand-receptor interaction

MW: 87 kDa

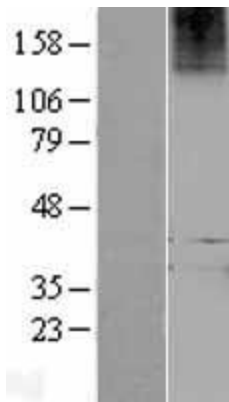
Gene Summary:

This gene encodes a member of the leucine-rich repeat-containing subgroup of the G protein-coupled 7-transmembrane receptor superfamily. The encoded protein plays a critical role in sperm motility, pregnancy and parturition as a receptor for the protein hormone relaxin. Decreased expression of this gene may play a role in endometriosis. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2011]

Product images:



Circular map for RC211338



Western blot validation of overexpression lysate (Cat# [LY402868]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211338 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).