# *m*LGR4/GPR48 VersaClone cDNA

**Catalog Number: RDC0662**

## Specifications:

| | |
|---|---|
| Gene: | *m*LGR4 |
| Accession: | NP_766259 |
| Insert size: | 2868bp |
| Concentration: | 10µg at 0.2µg/µL |

## Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

## Preparation and Storage

| | |
|---|---|
| Formulation | cDNA is provided in 10 mM Tris-Cl, pH 8.5 |
| Shipping | Ships at ambient temperature |
| Stability | 1 year from date of receipt when stored at -20°C to -80°C |
| Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. |

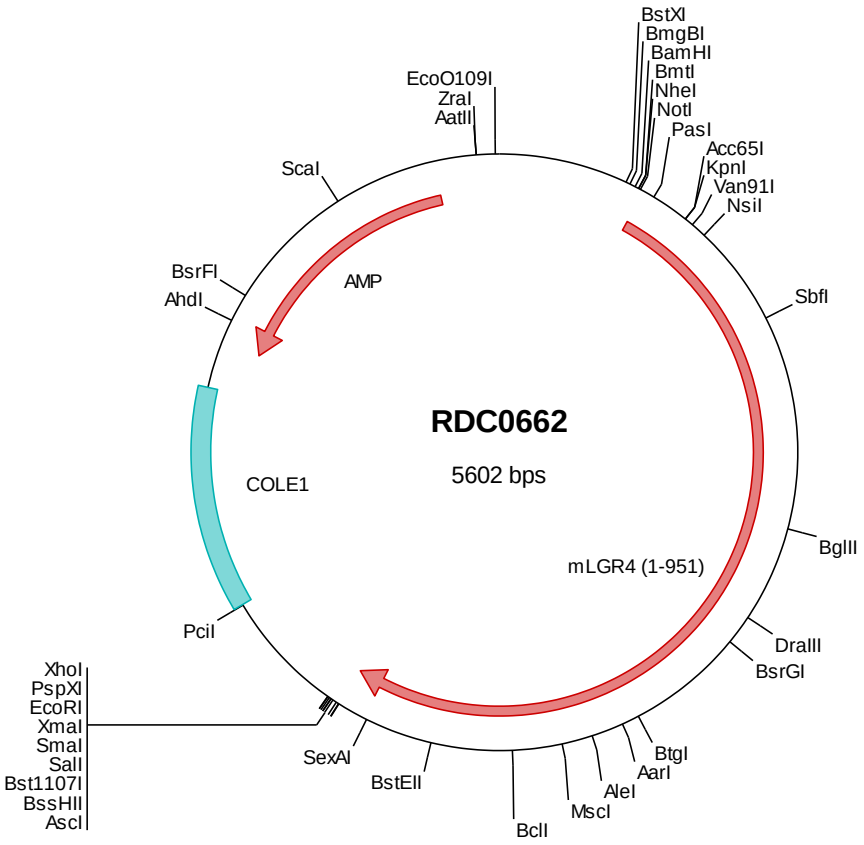
# *m*LGR4/GPR48 cDNA Plasmid

**Lgr4 leucine-rich repeat-containing G protein-coupled receptor 4 [ *Mus musculus* (house mouse) ]**

**Also known as:** GPR48

**Summary:**

LGR4 and LGR5 bind the R-spondins with high affinity and mediate the potentiation of Wnt/β-catenin signaling by enhancing Wnt-induced LRP6 phosphorylation. LGR4 is expressed in multiple steroidogenic tissues: placenta, ovary, testis and adrenal. LGR4 is expressed also in spinal cord, thyroid, stomach, trachea, heart, pancreas, kidney, prostate and spleen. Interestingly, LGR4 is not coupled to heterotrimeric G proteins or to β-arrestin when stimulated by the R-spondins, indicating a unique mechanism of action. Overexpression of LGR4 has been reported in several types of cancer.




FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

## > RDC0662 Plasmid DNA Sequence

```
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 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atgccgggcc cgctgcggct gctctgcttc ttcgccctgg ggctgctcgg
 501  ctcggccggg cccagcggcg cggcgccgcc tctctgcgct gcgccctgca gctgcgacgg cgaccgtcgg gtggactgct ccgggaaggg gttgacggcg
 601  gtaccggagg ggctcagcgc cttcacccaa gcactggata tcagtatgaa caatatcact cagttaccag aagatgcatt taagaatttt ccttttctag
 701  aggagctaca actggctggt aacgaccttt cttttatcca cccaaaagcc ttgtctgggt tgaaagaact caaagtccta accctccaga acaatcagtt
 801  gaaaacagta cccagtgaag ccattcgtgg actgagtgct ttgcagtctc tacgcttaga tgccaaccat attacctcag tcccggagga cagttttgaa
 901  gggctcgttc agttgcggca tctgtggctg gatgacaaca tcttgacgga agtgcctgtg cgtccgctca gcaacctgcc aaccctgcag gcgctgacct
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1101  tcaacactgt tttgatggac tagataacct ggaaaccctg gacttgaatt ataataactt ggatgaattt cctcaggcta ttaaagccct tcccagcctt
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1501  tcttataacg atataagaga ccttccaagt tttaatggtt gtcgtgcatt ggaagaaatt tcattgcagc gtaatcaaat ctccctgata aaggaaacta
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1701  cctggatgtg agtttcaatg aattaacctc atttcctacg gaaggcctga atgggctcaa tcaacttaaa cttgtgggta acttccagct gaaagatgcc
1801  ttggcagcca gagactttgc caatctcagg tctctatcag taccatatgc ttatcagtgt tgtgcatttt gggggtgtga ctcttatgca aatttaaaca
1901  cagaagataa cagcccccaa gaccacagtg tgacaaaaga gaaaggtgct acagatgcag caaatgccac cagcactgct gaaagtgaag aacatagcca
2001  aataatcatc cattgtacac cttcaacagg tgcttttaag ccctgtgaat atttactggg aagctggatg attcgcctta cagtgtggtt cattttcctg
2101  gtcgccttgc ttttcaacct gcttgtcatt ttaacagtgt ttgcgtcttg ttcatcactg cctgcctcca agctcttcat aggcttgatt tctgtgtcta
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2401  atgaaaaatg ggaaaagcag tcacctgcga cagttccagg tggctgccct cgtagctttg ctgggtgctg caatagcagg ctgcttccca ctgtttcacg
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2601  atttttattg atggccatta tctacactaa actctactgc aacttagaga aagaagaccc gtcagaaaac tcccagtcta gcatgattaa gcacgttgct
2701  tggctcatct tcacaaactg catcttcttc tgccctgttg catttttctc attcgcacca ttgatcacgg caatctccat cagccccgag ataatgaagt
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3001  ttgcagggta acctgactgt ctgtgactgc tgtgagtcat ttcttttgac aaaaccagta tcatgcaaac acttaataaa atcgcacagt tgtcctgtat
3101  tgacagtggc ctcttgccag aggccagagg cctactggtc tgattgtggc acacagtcgg cccattctga ctatgcagat gaagaggatt cctttgtctc
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3701  caggggataa cgcaggaaag aacatgtgag caaaaggcca gcaaaaggcc aggaaccgta aaaaggccgc gttgctggcg tttttccata ggctccgccc
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## > RDC0662 Translated Insert Sequence

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 201  sslvvlhlhn nkikslsqhc fdgldnletl dlnynnldef pqaikalpsl kelgfhsnsi svipdgafag npllrtihly dnplsfvgns afhnlsdlhs
 301  lvirgaslvq wfpnlagtvh lesltltgtk issipddlcq nqkmlrtldl syndirdlps fngcraleei slqrnqisli kettfqglts lrildlsrnl
 401  ireihsgafa klgtitnldv sfneltsfpt eglnglnqlk lvgnfqlkda laardfanlr slsvpyayqc cafwgcdsya nlntedngpq dhsvtkekga
 501  tdaanatsta eseehsqiii hctpstgafk pceyllgswm irltvwfifl vallfnllvi ltvfascssl pasklfigli svsnllmgiy tgiltfldav
 601  swgrfaefgi wwetgsgckv agslavfsse savflltlaa versvfakdv mkngksshlr qfqvaalval lgaaiagcfp lfhggqysas plclpfptge
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 801  yvffnpkfkd dwkllkrrvt rkhgsvsvsi ssqggcgeqd fyydcgmysh lqgnltvcdc cesflltkpv sckhlikshs cpvltvascq rpeaywsdcg
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