

Product datasheet for **RR210565**

Lgi1 (NM_145769) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lgi1 (NM_145769) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lgi1
Synonyms:	MGC105310
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RR210565 representing NM_145769
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAATCAGAAAGCATCAGAAGGATGGGAAATGCCTGCATTCCCCTGAAAAGAATTGCCTATTTCTCTAT
 GCCTCTTTTCTGTGGTTTTGCTGACTGAGGGGAAGAAACCAGCGAAGCCAAAATGCCTGCTGTGTGTAC
 TTGTAGCAAAGATAACGCTTTATGTGAGAAATGCGAGATCCATTCCACGCACCGTTCTCCTGATGTTATC
 TCACTATCCTTTGTGAGATCTGGTTTTACTGAAATCTCAGAAGGGAGTTTCTTGTTCACACCATCGCTGC
 AGCTCTTGTTATTCACGTCGAACTCCTTTGATGTGATCAGTGACGATGCTTTTATTGGTCTTCCACACCT
 AGAATATTTATTCATAGAAAACAACAATATCAAGTCCATTTCAAGACATACTTCCGGGGACTCAAGTCT
 CTGATTCACTTGAGTCTTGCAAACAACAATCTCCAGACACTCCAAAAGACATTTTCAAAGGCTGGATT
 CTTTAAACAAATGTGGACCTAAGAGGGAACCTTTAACTGTGACTGTAAGTGAAGTGGTGGTGGAAATG
 GCTCGGCCACCAACCGAACCGTGAAGACATCTACTGCGAAGGACCACCGGAGTATAAGAAACGTA
 ATCAACAGCCTCTCCCCAAGGATTTTGAAGTGTATCATTACAGAAATTTGCAAAGTCCAAGACCTGCCTT
 ACCAGTCACTGTCCATAGATACCTTTTCTATTGAAATGATGAATATGTAGTCACTGCTCAGCCTTTTAC
 TGGAAAATGCATTTTCTGGAATGGGACCATGTAGAGAAGACCTCCGGAATTATGACAACATTACAGGC
 ACGTCCACTGTGGTGTGCAAGCCATAGTCATTGACACTCAGCTCTATGTATTGTGGCCAGCTGTTTG
 GTGGCTCTCATATCTATAAGCGGGATGGCTTTGCAAACAAATTCATAAAAATCCAAGATATTGAAGTCT
 CAAAATCGAAAACCAATGACATCGAAACATTAAGATTGAAGACAACCTGGTACTTTGTAGTTGCTGAC
 AGTTCCAAAGCTGGCTTTACTACCATTTACAAATGGAATGGAAACGGATTCTACTCCCACCAATCCTTAC
 ATGCTTGGTACAGGGATACTGATGTGGAATACCTAGAAATAGCCAGACCACCATGACCCTCAGAACACC
 TCATTTGATCCTGTCCAGTAGTTCTCAGCGCCCTGTTATTTACCAGTGGAGCAAAGCAACACAGTTATTC
 ATTAACCAGACTGACATTTCCAACATGGAGGATGTGTATGCAGTGAAGCACTTCTCTGTGAAAGGTGATG
 TGTACATTTGCTTGACCAGATTCATTGGCGACTCCAAAGTCATGAAGTGGGGCGGCTCCTCCTCCAGGA
 CATTACAGAGGATGCCATCTCGAGGATCCATGGTGTCCAGCCTTTCAGATAAATAATTACCAATATGCA
 ATTCTGGGAAGCGATTACTCCTTTACTCAAGTGTATAACTGGGATGCAGAGAAAGCAAGTTTGTGAAGT
 TTCAGGAGTTAAATGTTACAGCACCCAGATCATTACGCACGTGCCATTAACAAGCGTAATTTTCTCTT
 CGCTTCCAGTTTTAAGGGAAACACACAGATTTACAACATGTCATAGTTGACTTAAGCGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR210565 representing NM_145769
 Red=Cloning site Green=Tags(s)

MESESIRRMGNACIPLKRIAYFLCLFSVLLTEGKPKAKPKCPAVCTCSKDNALCENARSIPRTVPPDVI
 SLSFVRSGFTEISEGSFLFTPSLQLLLFTSNFSDVISDDAFIGLPHLEYLFIENNNIKSISRHTFRGLKS
 LIHLSLANNLQTLPKDIFKGLDSL TNVDLRGNSFNCDCKLKWVWELGHTNATVEDIYCEGPPEYKRRK
 INSLSPKDFDCIITEFAKSQDLPYQSLSIDTFSYLNDEYVVIAPFTGKCIFLEWDHVEKTFRNYDNITG
 TSTVVCKPIVIDTQLYVIVAQLFGGSHIYKRDGFANKFKIQDIEVLKIRKPNDIETFKIEDNWFVVD
 SSKAGFTTIYKWNNGFVSHQSLHAWYRDTDVEYLEIARPPLTLRPHLILSSSSQRPVIYQWSKATQLF
 INQTDIPNMDVYAVKHF SVKGDVYICL TRF IGDSKVMKWGSSSFQDIQRMP SRGSMVFQPLQINNYQYA
 ILGSDYSFTQVYNWDAEKAKFVKFQELNVQAPRSFTHVSINKRNFLFASSFKGNTQIYKHVIVDLA

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_145769

ORF Size: 1671 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_145769.3](#), [NP_665712.1](#)

RefSeq Size: 1674 bp

RefSeq ORF: 1674 bp

Locus ID: 252892

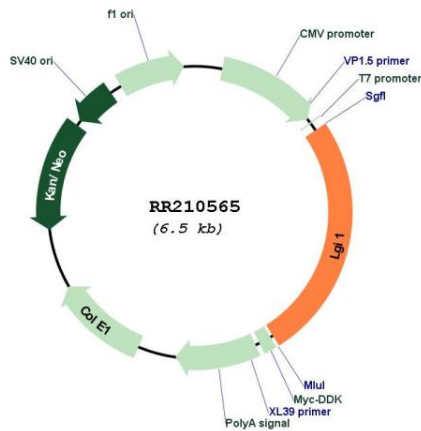
UniProt ID: [Q8K4Y5](#)

Cytogenetics: 1q53

MW: 63.7 kDa

Gene Summary: Plays a role in suppressing the production of MMP1/3 through the phosphatidylinositol 3-kinase/ERK pathway (By similarity). Regulates voltage-gated potassium channels assembled from KCNA1, KCNA4 and KCNAB1. It slows down channel inactivation by precluding channel closure mediated by the KCNAB1 subunit. Ligand for ADAM22 that positively regulates synaptic transmission mediated by AMPA-type glutamate receptors.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR210565