

Product datasheet for RC224397

GRID1 (NM_017551) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRID1 (NM_017551) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GRID1
Synonyms:	GluD1; GluD1-b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224397 representing NM_017551 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RC224397 representing NM_017551
 Red=Cloning site Green=Tags(s)

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MEALTLWLLPWICQCVSVRADSIIHIGAI FEENA KDDR VFQLAVSDL SLNDDILQSEKITYSIKVI EAN
NPFQAVQ EACDLM TQGILALVTSTGCASANALQSLTDAMH IPHLFVQRNPGGSPRTACHLNPSPDGEAYT
LASRPPVRLNDVMLRLVTEL RWQKFVMFYDSEYDIRGLQSFLDQASRLGLDVS LQKVDKNI SHVFTSLFT
TMKTEELNRYRDLRRAILL LSPQGAHSF INEAVETNLASKDSHWVFN E EISDPEILD LVHSALGRMTV
VRQIFPSAKDNQKCTRNHR ISSLLCDPQEGYLQMLQISNL YLYDSV LMLANAFHRKLEDRKWHSMASLN
CIRKSTKPWNGGRSMLDIKKGHITGLTGVM EFREDSSNPYVQFEILGTTYSETFGKDMRKLATW DSEKG
LNGSLQERPMGSRLQGLTLKVVTVLEEFVMAENILGQPKRYKGF SIDVLDALAKALGFKYEIYQAPDG
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GLLLACLVA ALELW WNSNRCHQETPKEDKEVNLEQVHRRMNSLMDE DIAHKQISPASIELSALEMGLAP
TQTL EPTREYQNTQLSVSTFLPEQSSHGTSRTLSSGPSSN LPLPLSSSATMPSMQCKHRSPNGGLFRQSP
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8009_e10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_017551

ORF Size: 3027 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_017551.3](#)

RefSeq Size: 5849 bp

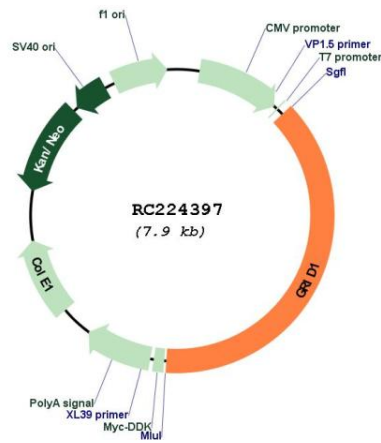
RefSeq ORF: 3030 bp

Locus ID: 2894

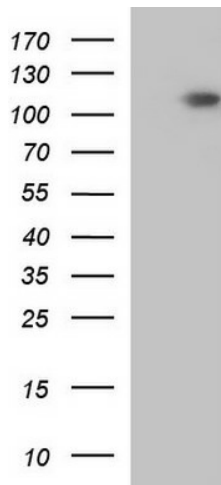
UniProt ID: [Q9ULK0](#)
Cytogenetics: 10q23.1-q23.2
Protein Families: Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane
Protein Pathways: Neuroactive ligand-receptor interaction
MW: 112.13 kDa

Gene Summary: This gene encodes a subunit of glutamate receptor channels. These channels mediate most of the fast excitatory synaptic transmission in the central nervous system and play key roles in synaptic plasticity.[provided by RefSeq, Jan 2009]

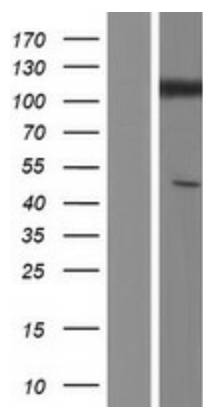
Product images:



Circular map for RC224397



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GRID1 (Cat# RC224397, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GRID1(Cat# [TA590502]). Positive lysates [LY413698] (100ug) and [LC413698] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413698]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224397 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).