

Product datasheet for **RC239521**

KA1 (GRIK4) (NM_001282473) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KA1 (GRIK4) (NM_001282473) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GRIK4
Synonyms:	EAA1; GluK4; GluK4-2; GRIK; KA1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC239521 representing NM_001282473
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

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Protein Sequence: >RC239521 representing NM_001282473
 Red=Cloning site Green=Tags(s)

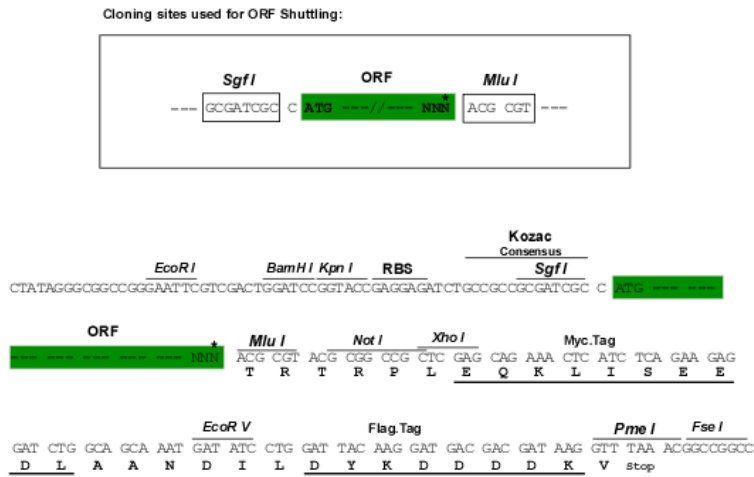
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 ARKADLAVAGLTITAEREKVIDFSKPFMTLGISILYRVHMGRKPGYFSLDFSPGVWLFMLLAYLVSC
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 IISSTYANLAAFLTVQRMDVPIESVDDLADQTAIEYGTIHGSSMTFFQNSRYQTYQRMWNMYMSKQPS
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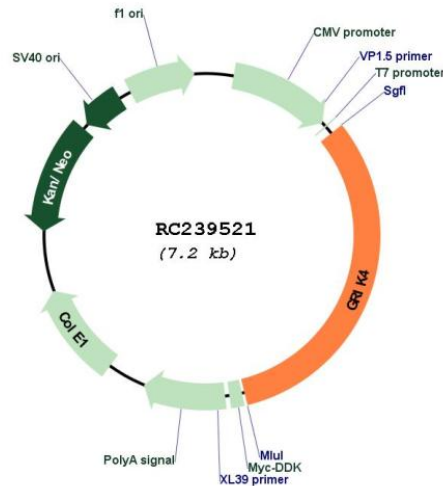
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001282473

ORF Size: 2295 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_001282473.2](#), [NP_001269402.1](#)

RefSeq Size: 3057 bp

RefSeq ORF: 2298 bp

Locus ID: 2900

Cytogenetics:	11q23.3
Protein Families:	Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction
MW:	86.2 kDa
Gene Summary:	<p>This gene encodes a protein that belongs to the glutamate-gated ionic channel family. Glutamate functions as the major excitatory neurotransmitter in the central nervous system through activation of ligand-gated ion channels and G protein-coupled membrane receptors. The protein encoded by this gene forms functional heteromeric kainate-preferring ionic channels with the subunits encoded by related gene family members. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2013]</p>