

## Product datasheet for **RG239521**

### **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:	TurboGFP
Symbol:	GRIK4
Synonyms:	EAA1; GluK4; GluK4-2; GRIK; KA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG239521 representing NM\_001282473.  
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
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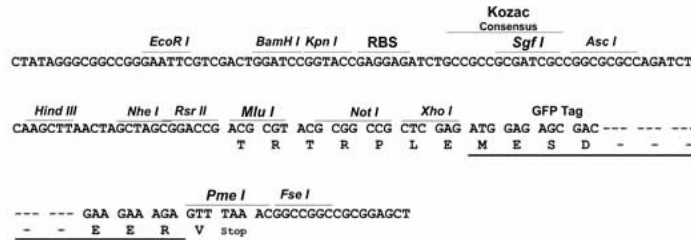
**Protein Sequence:** >Peptide sequence encoded by RG239521  
 Blue=ORF Red=Cloning site Green=Tag(s)

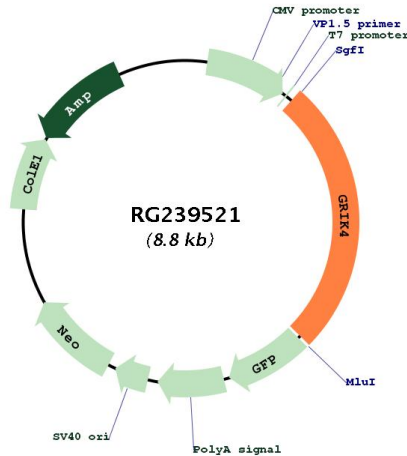
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 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


<b>ACCN:</b>	NM_001282473
<b>ORF Size:</b>	2295 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>RefSeq:</b>	<a href="#">NM_001282473.2</a> , <a href="#">NP_001269402.1</a>
<b>RefSeq Size:</b>	3057 bp
<b>RefSeq ORF:</b>	2298 bp
<b>Locus ID:</b>	2900
<b>Cytogenetics:</b>	11q23.3
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane
<b>Protein Pathways:</b>	Neuroactive ligand-receptor interaction
<b>MW:</b>	86.2 kDa

**Gene Summary:**

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]