

Product datasheet for RC222369L3

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OriGene Technologies, Inc.

GRIK2 (NM_021956) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: GRIK2 (NM 021956) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: GRIK2

Synonyms: EAA4; GLR6; GluK2; GLUK6; GLUR6; MRT6

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC222369).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_021956

ORF Size: 2724 bp





GRIK2 (NM_021956) Human Tagged Lenti ORF Clone - RC222369L3

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: <u>NM 021956.2</u>

 RefSeq Size:
 3322 bp

 RefSeq ORF:
 2727 bp

 Locus ID:
 2898

UniProt ID: Q13002
Cytogenetics: 6q16.3

Domains: lig chan, ANF receptor

Protein Families: Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

MW: 98.9 kDa

Gene Summary: Glutamate receptors are the predominant excitatory neurotransmitter receptors in the

mammalian brain and are activated in a variety of normal neurophysiologic processes. This gene product belongs to the kainate family of glutamate receptors, which are composed of four subunits and function as ligand-activated ion channels. The subunit encoded by this gene is subject to RNA editing at multiple sites within the first and second transmembrane domains, which is thought to alter the structure and function of the receptor complex.

Alternatively spliced transcript variants encoding different isoforms have also been described for this gene. Mutations in this gene have been associated with autosomal recessive cognitive

disability. [provided by RefSeq, Jul 2008]