

Product datasheet for **SC337415**

KA1 (GRIK4) (NM_001282473) Human Untagged Clone

Product data:

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



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Fully Sequenced ORF: >NCBI ORF sequence for NM_001282473, the custom clone sequence may differ by one or more nucleotides

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ATGCCCGCGTCTCGGCGCCTTTGGTGCTGCTTCCTGCGTGGCTCGTGATGGTGCCTGCAGCCCGCACT
CCTTGAGGATCGCTGCTATCTTGGACGACCCCATGGAGTGCAGCAGAGGGGAGCGGCTCTCCATCACCT
GGCCAAGAACCAGCATCAACCGCGCTCCTGAGAGGCTGGGCAAGGCCAAGGTCGAAGTGGACATCTTTGAG
CTTCTCAGAGACAGCGAGTACGAGACTGCAGAAACCATGTGTAGATCCTCCCAAGGGGTGGTCGCTG
TCCTCGGACCATCGTCCAGCCCAGCCTCCAGCTCCATCATCAGCAACATCTGTGGAGAGAAGGAGGTCCC
TCACTTCAAAGTGGCCCCAGAGGAGTTCGTCAAGTTCAGTTCAGAGATTACAAACCTGAACCTCCAC
CCCAGCAACACTGACATCAGCGTGGCTGTAGTGGGATCCTGAACCTTCTCAACTGCACCACCGCTGCC
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CACGCTGTCCGTCGCGATGCTGGATGACACCCGGGACCCACCCCGCTCCTCAAGGAGATCCGGGACGAC
AAGACCGCCACCATCATATCCAGCCAACGCCTCCATGTCCACACCATCCTCCTGAAGGCAGCCGAAC
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TTTGCCAGAGCCTCAACCAGTCCCTGGCAGGAGAACTGTGACCATGTGCCCTTCACTGGGCTGCGCTCT
CCTCGGCCCTGCTGTTTGTGCTGTCTATGCTGTGGTGAAGTGCAGGAACTGAACCGGAGCCAAGA
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CTCCTTCTGGACCCATTTTCTCCGGGCGTCTGGCTTTCATGCTTCTAGCCTATCTGGCCGTGAGTGT
GTCCTTCTCTGGTGGCTCGGTTGACGCCCTACGAGTGGTACAGCCACACCCATGTGCCAGGGCCGGT
GCAACCTCCTGGTGAACCACTCCTGGGCAACAGCCTCTGGTTTCCGGTCCGGGGGTTTCATGCAGCA
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ATCATCATCTATCCTACAGGCCAACCTGGCAGCCTTCCCTGACCGTGCAGCGCATGGATGTGCCATTG
AGTCAGTGGATGACCTGGCTGACCAGACCGCCATTGAATATGGCACAATTCACGGAGGCTCCAGCATGAC
CTTCTTCCAAAATTTCCGCTACCAGACCTACCAACGCATGTGGAATTACATGATTCCAAGCAGCCAGC
GTGTTCTGTGAAGAGCACAGAGGAGGGAATCGCCAGGGTGTGAAATCCAACCTACGCTTCTCCTGGAAT
CCACCATGAACGAGTACTATCGGCAGCGAACTGCAACCTCACTCAGATTGGGGGCTGCTGGACACCAA
GGGCTATGGGATGGCATGCCAGTCGGTATCGGGGAGGGAACAGCCTCTTTGGGTAG
    
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Restriction Sites: SgfI-MluI

ACCN: NM_001282473

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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

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]

Transcript Variant: This variant (3) has an additional exon in the 5' UTR but lacks several 3' terminal exons, compared to variant 1. Its transcription extends past a splice site that is used in variant 1, resulting in a novel 3' coding region and 3' UTR. The resulting isoform (2) is shorter and has a distinct C-terminus, compared to isoform 1.