

Product datasheet for **RG224695**

GRIK5 (NM_002088) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRIK5 (NM_002088) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRIK5
Synonyms:	EAA2; GluK5; GRIK2; KA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG224695 representing NM_002088
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCGGCTGAGCTGCTGCTGCTGATTGTTGCCTTCGCCAGCCCAGCTGCCAGGTGCTCTCATCAC
 TGCATGCGCTGCAATCCTGGATGATCAGACAGTGTGGCCGCGGTGAGCGTCTGGCCTTGGCCTTGGC
 CCGGGAGCAGATCAACGGGATCATCGAGGTCCCAGCCAAGGCCGAGTGAAGTAGACATCTTTGAGCTG
 CAGCGGGACAGCCAGTACGAGACCACGGACACCATGTGTGATCTTACCCAAAGGGTTGTGTCTGTCC
 TTGGGCCCTCCTTAGCCAGCATCTGCCTCCACCGTGGCCATATCTGTGGAGAGAAGGAGATCCCCCA
 CATCAAGTGGTCCCGAGGAGACACCCCGCTTCAGTACCTTCGCTTCGCTGTGTGAGCCTGTACCCC
 AGTAACGAGGACGTGAGTTCGGCGTCTCCGAATCCTCAAGTCTTCACTACCCCTCGGCCAGCCTCA
 TCTGCGCAAGGCTGAGTGCCTGCTGCGATTGGAGGAAGTGGTGGTGGTTCCTCATCTCAAGGAGAC
 GCTGTGAGTGGATGTTGGACGACAGCCGGGACCCACACCCTGCTCAAGGAGATCCGTGATGACAAG
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 GAATGACCTCAGCGTTTACAAGTACATCCTCACCACCATGGACTTCCCCATCTGCATCTGGACGGTAT
 TGTGGAGGACTCCTCAACATCCTGGGCTTCTCCATGTTCAACACGTCCCACCCCTTCTACCCCTGAGTT
 GTCCGACGCTCAACATGCTCCTGGAGGGAGAAGTGTGAAGCCAGCACCTACCTGGGCCCTGCGTGTGAG
 CCGCCCTGATGTTGACGCGTGCACGTGGTGGTGGAGCGTGTCCGAGAGCTGAACCGCAGCCAGGAGAT
 CGGTGTGAAGCCTCTGGCCTGTACATCGGCCAACATTTGGCCCCACGGGACCGCCTCATGAACCTG
 CGCATGGTAGAGTATGATGGGCTGACCGGGCGGGTGGAGTTCAACAGCAAAGGGCAGAGAACCAACTACA
 CCCTGCGCATCCTAGAAAAGTCCCGCAGGGCCACCGTGGAGATTGGGGTGTGGTACTCTAACCGCACCT
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 ACCATCCTGGAGAACCATACGTGATGCGCCGGCCCAACTTCCAGGCCCTGTGGGGAACGAACGCTTCG
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 AGCCCTTATGACCTGGGGATCAGCATCCTCTACCGAGTGCACATGGGCCGAAGCCTGGCTACTTCTC
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 CTGTTTCTGGCTGCCAGGCTGAGCCCTATGAGTGGTATAACCCACACCCATGCCTGCGGGCAGCCCCC
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 ATCATCTCCTCTACACGGCAACCTGGCCGCTTCTCACCGTGCAGCGCATGGAGGTGCCTGTGGAGT
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 CTTCCAGAATCACGGTACCAACGTACCAGCGCATGTGGAACATACATGCAGTGAAGCAGCCAGCGTG
 TTCGTCAAGAGCACAGAAGAGGGCATTGCCCGCTCCTCACTCCCGCTACGCTTCTGCTCGAGTCCA
 CCATGAACGAATACCACGGCGCCTCACTGCAACCTCACCCAGATCGGGGACTCCTCGACCAAGGG
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 ATCGAGCTAAAGTTTGGCATGGAGAACATTGGTGGCATTTCATCGTGTCTCATCTGTGCCTCATCAT
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 GCCGACGCCCGGGCGCCGAGCCGGCCCTGCTGTACTGCGCGGTCGCGAGATGCGCCTCAGCAA
 CGGCAAGCTCTACTCGCCGGCGCGGGCGGGATGCGGGCAGCGCACGGGGGCCGAGCGCCTCCTG
 GACGACCCGGGGCCCCAGCGGAGCCGACCCGCGCCCCACCCCTGCACCCAGTGCCTGCTGCTGCC
 AGGAGTCCGGCGCATCCAGGCGTGCGGGCTCGGGGGCCGGCGCGCTCCGCGTGGCTGGGCGTCCC
 CGCGAAGCCACCAGCCGCCCGCGGCGCTGGCCCCGCGGCCCGGGAGCTGGCGGAGCAGAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG224695 representing NM_002088
 Red=Cloning site Green=Tags(s)

MPAELLLLLIVAFASPSCQVLSLRMAAILDDQTVCGRGERLALALAREQINGIIEVPAKARVEVDIFEL
 QRDSQYETDTMCQILPKGVSVLGPSSPASASTVSHICGEKEIPHIKVGPEETPRLQYLRFAVSLYP
 SNEDVSLAVSRILKSFNYPASLICAKAECLLRLEELVRGFLISKETLSVRMLDDSRDPTLLKEIRD
 VKVSTIIIDANASISHLILRKASELGMTSAFYKYILTTMDFPILHLDGIVEDSSNILGFSMFNTSHPFY
 PEFVRSLNMSWRENCEASTYLGPAALSAALMFDVAVHVVSAVRELNRSQIEIGVKPLACTSANIWP
 HGTSLMNYLRMVEYDGLTGRVEFNSKQRTNYTLRILEKSRQGHREIGVWYSNRRLAMNATTL
 DINLSQTLANKTLVVTIILENYPYMRPNFQALSGNERFEGFCVDMLRELAELLRFYRLRLVEDGLY
 GAPEPNGSWTGMVGLINRKADLAVAFAFTITAEREKVIDFSKPFMTLGISILYRVHMGRKPGYF
 SFLDPFSPA VWLFMLLAYLAVSCLFLAARLSPYEWYNPHPCRLRPHILENQYTLGN
 SLWFPVGGFMQQGSEIMPRALSTRCSVGVWVAFTLI IISSTANLAFLTQVRMEVPVESAD
 DLADQTNIEYGTIHAGSTMTFFQNSRYQTYQRMWNMQSKQPSV FVKSTEEGIARVLSRYA
 FLLESTMNEYHRRNCNL TQIGLLDTKGYGIGMPLGSPFRDEITLAILQLQ ENNRLEILKR
 KWEGGRCPKEEDHRAKGLGMENIGGIFIVLICGLIIAVFVAVMEFIWSTRRSASEEVS
 VCQEMQLQLRHAVSCRKTSRSTRRRRPPGSPRALLSLRAVREMRLSNGKLYSAGAGGDAGS
 AHGGPQRLLDDPGPPSGARPAAPTCTHVRVCQECRRIQALRASGAGAPRGLGVP AEATSP
 PRPRPGPAGPRELAEHE

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

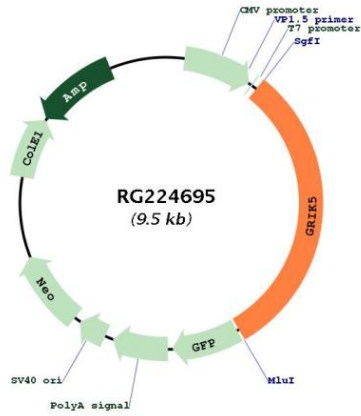


ACCN: NM_002088

ORF Size: 2940 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
Reconstitution Method:	<ol style="list-style-type: none">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:	<p>NM_002088.4, NP_002079.3</p>
RefSeq Size:	<p>3551 bp</p>
RefSeq ORF:	<p>2943 bp</p>
Locus ID:	<p>2901</p>
UniProt ID:	<p>Q16478</p>
Cytogenetics:	<p>19q13.2</p>
Domains:	<p>lig_chan, ANF_receptor</p>
Protein Families:	<p>Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane</p>
Protein Pathways:	<p>Neuroactive ligand-receptor interaction</p>
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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]</p>

Product images:



Circular map for RG224695