

Product datasheet for **RG223571**

GRIK3 (NM_000831) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRIK3 (NM_000831) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRIK3
Synonyms:	EAA5; GLR7; GluK3; GLUR7; GluR7a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG223571 representing NM_000831
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACCGCTCCCTGGCGGCGCTCCGGAGTCTGGTTTGGGAATACTGGGCGGGCTCCTCGTGTGCGCT
 TCTGGATCCCGGACTCGCGCGGATGCCCCACGTCATCCGGATCGGAGGAATCTTCGAGTATGCGGACGG
 CCCCAACGCCAGGTCATGAATGCCGAGGAGCATGCCTTTCGATTTTCTGCCAACATCATCAACAGGAAC
 AGGACTCTGCTGCCAACACAACCTTGACCTATGACATACAGAGGATTCACTTCCATGACAGCTTCGAGG
 CGACCAAAAAGGCTGTGACCAGCTGGCACTGGGCGTGGTGGCGATCTTCGGCCCATCACAGGGCTCCTG
 CACCAATGCCGTCCAGTCCATCTGCAATGCCCTGGAGGTGCCCCACATCCAGCTGCGTTGGAAGCACCC
 CCGCTGGACAACAAGGACACCTTCTACGTGAACCTCTACCCGACTACGCTCGCTCAGCCATGCCATCC
 TCGACCTGGTCCAGTACCTCAAGTGGCGGTCCAGCCACCGTGGTCTATGACGACAGTACAGGGCTCATCCG
 ACTGCAGGAGCTCATCATGGCCCATCAAGATAACAACATCCGCCGAAGATCCGTGAGCTCCCATCGAC
 TCTGACGACTCGCGCCCTTGTCAAGGAGATGAAGCGAGGCCGGGAATTCGCGATTATCTTCGACTGCA
 GCCACACTATGGCGGCCAGATCCTCAAGCAGGCCATGGCCATGGGCATGATGACTGAGTACTACCACT
 CATCTTACCCTCTGGATCTCTACGCTTTAGACCTGGAGCCCTACCGCTACTCAGGCGTGAACCTGACA
 GGATTCGGATTCTCAATGTGGACAACCCACACGCTCTCGGCCATTGTGGAGAAGTGGTCCATGGAGCGGC
 TGCAGGACAGTCCCGGTCCGAGTCTGGCTGCTGGATGGAGTGTGATGACTGATGCAGCCTTACTGTA
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 CGACCTGCTAAAGGAGCTGGCCACATCCTTGGTTTCTCCTATGAGATCCGGTGGTGGAGGACGGCAAG
 TACGGGGCACAGGATGACAAGGGCCAGTGAACGGCATGGTCAAGGAGCTCATCGACCACAAGGCAGATC
 TGGCCGTGGCCCCCTGACCATACCCATGTTTCGAGAGAAGGCCATCGACTTCTCAAGCCCTTCATGAC
 ACTTGGTGTGAGCATCCTGTATCGAAAGCCCAATGGCACCAACCCAGCGTCTTCTCCTTCTCAATCCC
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 CCAGGTTCCAGCCCTATGAGTGGTACGATGCTCACCCCTGCAACCCTGGCTCCGAGGTGGTGGAAAATAA
 CTTCACTCTGCTTAACAGCTTCTGGTTTGAATGGGATCCCTGATGCAGCAAGGGTCTGAGCTGATGCC
 AAAGCCCTGTCCACAGCATCATTGGTGGCATCTGGTGGTTCTTTCACGCTCATCATCTCTTCTTACACA
 CGGCCAACCTGGCTGCCTTCTGACCGTGGAGCGCATGGAATCACCCATTGACTCTGCTGATGACCTGGC
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 GCAGAGGAACTGCAACCTCACCCAGATCGGGGGCCTCATTGACTCCAAGGGTACGCGATCGGCACGCCC
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 TCATGAAGGAGAAGTGGTGGCGGGCAGCGGTCTCTGAGGAGGAAAACAAAGAGGCCAGTGCCTGGG
 GATCCAGAAGATCGGGGCATCTTATTGTCTGGCCGCCGGGCTGGTCTCTCTGTGCTGGTGGCCGTG
 GGCGAGTTTGTGTACAAGCTCCGCAAAACAGCAGAGAGAGAGCAGCGTTCCTTCTGCAGCACCGTGGCCG
 ATGAGATCCGTTTCTCCCTTACCTGCCAGCGTCAAGCACAAGCCTCAGCCTCCATGATGGTCAA
 GACTGACGCCGTCATCAACATGCACACATTCAATGACCGCGGCTTCCCGCAAGGACAGCATGGCCTGC
 AGCACATCCTTAGCCCTGTGTTCCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG223571 representing NM_000831
 Red=Cloning site Green=Tags(s)

MTAPWRRRLRSLVWEYWAGLLVCAFWIPDSRGMPhVIRIGGIFeYADGPNAQVMNAEEHAFRFSANIINRN
 RTLLPNTTLTYDIQRIHFHDSFEATKKACDQLALGVVAIFGPSQGSCTNAVQSIcNALEVPHIQLRWKHH
 PLDNKDTFYVNLYPDYASLShAILDLVQYLKwRSATVVYDDSTGLIRLQELIMAPSRyNIRLKIRQLPID
 SDDSRPLLkEMKRGREFRIIFDCSHTMAAQILKQAMAMGMMTEYyHFIFTTLDLYALDLEPYRySGVNLt
 GFRILNVdNPHVSAIveKwSMERLQAAPRSEGLLDGVMMDAALLYDAVHIVSVcyQRAPQMTVNSLQC
 HRHKAwRFGGRFMNFikEAQWELTGRIvFNKTSGLRTDFDLDIISLkEDGLEKvGVWSPADGLNITEVA
 KGRGPNVTDsLTNRSLIVTTVLEEPFvMFRKSDRTLYGNDRfEGYCIDLLkELAHILGFsYEIRLVEDGK
 YGAQDDKQwNGMVKELIDHKADLAVAPLTITHVREKAIDfSKPFMTLGVsILYRKPNGTNPSVfSFLNP
 LSPDIWMyVLLAYLGVsCVLFVIARfSPYEWYDAHPCNPgSEVVENNFTLLNSfWFGMGSMLQqGSELMP
 KALSTRiIGGIWFFTLIIISsYANLAAFLTVERMESpIDSADDLAKQTKIEYGAVKDGATMTFFKKS
 ISTFEKMWAFMSKPSALVKNNEEGIQALtADYALLMESTTIEYVTQRNCNLtQIGGLIDSKGYGIGTP
 MGSPYRDKITIAILQLQEEDKLHIMKEKwWRGSGCPeeENKEASALGIQkIGGIFIVLAAGLVLSVLVAV
 GEFVYKLRkTAEREQRsFCSTVADEIRfSLTCQRrvKHKPQPPMMVKTDAVINMHTfNDRRLPGKDSMAC
 STSLAPVFP

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



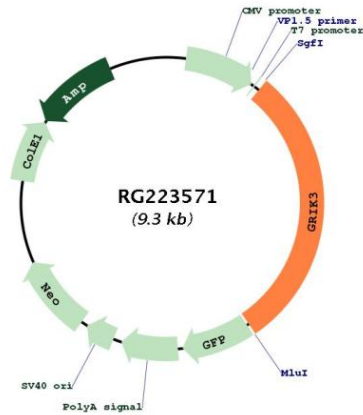
ACCN:

NM_000831

ORF Size:	2757 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:	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:	<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:	NM_000831.4
RefSeq Size:	3733 bp
RefSeq ORF:	2760 bp
Locus ID:	2899
UniProt ID:	Q13003
Cytogenetics:	1p34.3
Domains:	lig_chan, ANF_receptor
Protein Families:	Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction

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. It is not certain if the subunit encoded by this gene is subject to RNA editing as the other 2 family members (GRIK1 and GRIK2). A Ser310Ala polymorphism has been associated with schizophrenia, and there are conflicting reports of its association with the pathogenesis of delirium tremens in alcoholics. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RG223571