

Product datasheet for **RC403754**

GRK4 (NM_182982) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	GRK4 (NM_182982) Human Mutant ORF Clone
Mutation Description:	V486A
Affected Codon#:	486
Affected NT#:	1457
Nucleotide Mutation:	GRK4 Mutant (V486A), Myc-DDK-tagged ORF clone of Homo sapiens G protein-coupled receptor kinase 4 (GRK4), transcript variant 1 as transfection-ready DNA
Effect:	Essenil hyperension, ssoiion wih
Symbol:	GRK4
Synonyms:	GPRK2L; GPRK4; GRK4a; IT11
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_182982
ORF Size:	1734 bp
Restriction Sites:	Sgfl-Mlul



[View online »](#)

ORF Nucleotide Sequence:

>RC403754 representing NM_182982
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCTCGAGAACATCGTGGCCAACCTCGCTGCTGCTGAAAGCGCGTCAAGGAGGATATGGCAAAAAA
 GTGGTCGTAGTAAAAATGGAAGGAGACTGACACTGCCTCCTGTGAGCCAGTGCAGTGAAGCTTAGACA
 TTCCATTGAAAAGGATTATAGCAGTCTTTGTGACAAGCAACCGATAGGAAGACGTCTCTTCAGGCAGTTC
 TGTGATACCAAACCCACTCTAAAGAGGCACATTGAATCTTGGATGCAGTGGCAGAATATGAAGTTGCCG
 ATGATGAGGACCGAAGTATTGTGGACTGTCAATCTTAGATAGATTCTTCAATGATAAGTTGGCAGCCCC
 TTTACCAGAAATACCTCCAGATGTTGTGACAGAATGTAGATTGGGACTGAAGGAGGAGAACCCTTCCAAA
 AAAGCCTTTGAGGAATGACTAGAGTTGCCATAACTACCTAAGAGGGGAACCATTTGAAGAATACCAAG
 AAAGCTCATATTTTTCTCAGTTTTTACAATGGAATGGCTGAAAAGGCAACCCGTAACAAAGAACACATT
 TAGACATTACAGAGTTCTAGGAAAAGGCGGATTTGGAGAGGTTTGCCTGTCAAGTGCAGCCACAGGA
 AAAATGTATGCCTGCAAAAAGCTACAAAAAAAAGAATAAAGAAGAGGAAAGGTGAAGCTATGGCTCTAA
 ATGAGAAAAGAATTCTGGAGAAAAGTCAAAAGTAGATTCTGATGTTAGTTTTCAGCTACGCTTATGAAACAA
 AGATGCCTTGTGCTTGGTGTCCACATTATGAATGGAGGGGATTTGAAGTTTACATTTACAACCTGGGC
 AATCCCGGCTTTGATGAGCAGAGAGCCGTTTTCTATGCTGCAGAGCTGTGTTGCGGCTTGGAAAGATTTAC
 AGAGGGAAAGAATTGTATACAGAGACTTGAAGCCTGAGAATATCTCCTTGATGATCGTGGACACATCCG
 GATTTACAGACCTCGGTTTGGCCACAGAGATCCCAGAAGGACAGAGGGTTCGAGGAAGAGTTGGAACAGTC
 GGCTACATGGCACCTGAAGTTGTCAATAATGAAAAGTATACGTTTAGTCCCGATTGGTGGGGACTTGGCT
 GTCTGATCTATAAATGATTGAGGACATTCTCCATTCAAAAAATACAAAGAGAAAGTCAAAATGGGAGGA
 GGTCGATCAAAGAATCAAGAATGATACCGAGGATATTCTGAGAAGTTTTAGAGGATGCCAAATCTATC
 TGCAGGATGTTACTACCAAGAATCCAAGCAAGCGGCTGGGCTGCAGGGGCGAGGGAGCGGCTGGGGTGA
 AGCAGCACCCCGTGTTCAGGACATCAACTTCAGGAGGCTGGAGGCAACATGCTGGAGCCCCCTTTCTG
 TCCTGATCCTCATGCCGTTTACTGTAAGGACGCTCTGGATATCGAGCAGTTCTCGGCGGTGAAAGGGATC
 TACCTGGACACCCGAGATGAAGACTTCTATGCTCGGTTTGTACCGGCTGTCTCCATCCCTGGCAGA
 ATGAGATGATCGAATCTGGGTGTTTCAAAGACATCAACAAAAGTGAAGTGAAGGAGCTTTGCCATTAGA
 TCTAGACAAGAACATACATACCCCGTTTTCCAGACCAACAGAGGCTTCTCTATAGACTCTTCAGAAGA
 GGGGGTGCCTGACCATGGTCCCAGTGAAGAAGTGAACCAAGCAATGC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

>RC403754 representing NM_182982
 Red=Cloning site Green=Tags(s)

MELENIVANSLLLKARQGGYGKKSGRSKKWEILTLPPVQSCSELRHSIEKDYSSLCDKQPIGRRLFRQF
 CDTKPTLKRHIEFLDAVAEYEVADDEDSDCGLSILDRFFNDKLAAPLPEIPPDVVTECRLGLKEENPSK
 KAFEECTRVAHNYLRGEPFEEYQESSYFSQFLQKWLERQPVTKNTRHYRVLGKGGFGEVCACQVRATG
 KMYACKKLQKKRIKKRKGEMALNEKRILEKVQSRFVSLAYAYETKDALCLVLTIMNGGDLKFHIYNLG
 NPGFDEQRAVYAAELCCGLEDLQRERIVYRDLKPENILLDRGHIRISDLGLATEIPEGQVRGRVGTV
 GYMAPEVVNNEYTFSPDWWGLGLIYEMIQGHSPFKKYKEKVKWEEVDQRIKNDTEEYSEKFSEDAISI
 CRMLLTKNPSKRLGCRGEGAAGVKQHPVFKDINFRRLEANMLEPPFCPPDPHAVYCKDVLIDIEQFSAVKGI
 YLDTADEDFYARFATGCVSIPWQNEMIESGCFKDKINKSEEEALPLDLDKNIHTPVSRRPVRGFFYRFLFR
 GGCLTMVPSEKEVEPKQC

SGP**TRTRRLEQKLI**SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

OTI Disclaimer:

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.

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).
RefSeq:	<u>NP_892027</u>
RefSeq Size:	1734 bp
RefSeq ORF:	1737 bp
Locus ID:	2868
Cytogenetics:	4p16.3
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Chemokine signaling pathway, Endocytosis
MW:	63.6 kDa
Gene Summary:	This gene encodes a member of the guanine nucleotide-binding protein (G protein)-coupled receptor kinase subfamily of the Ser/Thr protein kinase family. The protein phosphorylates the activated forms of G protein-coupled receptors thus initiating its deactivation. This gene has been linked to both genetic and acquired hypertension. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2013]