

Product datasheet for **RC402677**

GRK1 (NM_002929) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	GRK1 (NM_002929) Human Mutant ORF Clone
Mutation Description:	P290L
Affected Codon#:	290
Affected NT#:	869
Nucleotide Mutation:	GRK1 Mutant (P290L), Myc-DDK-tagged ORF clone of Homo sapiens G protein-coupled receptor kinase 1 (GRK1) as transfection-ready DNA
Effect:	Reiniis pimenos
Symbol:	GRK1
Synonyms:	GPRK1; RHOK; RK
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_002929
ORF Size:	1689 bp
Restriction Sites:	Sgfi-Mlul



[View online »](#)

ORF Nucleotide Sequence:

>RC402677 representing NM_002929
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGATTCGGGTCTTTGGAGACCGTGGTGGCCAACCTCTGCCTTCATCGCCGCCCGAGGCAGCTTTGACG
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 ACTATGACACGGCAGACAATGACCTCCAGCCACAGAAGGCCAGACCATCTGGCCAGTACCTGGACCC
 CCAGGCCAAACTCTTCTGCAGCTTCTGGATGAGGGGATAGTGGCGAAGTTTAAAGGAGGGCCTGTGGAG
 ATCCAGGACGGGCTCTTCCAGCCCTGCTGCAGGCCACCTGGCACACCTGGGCCAAGCCCCCTCCAGG
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 GGACTGGTTCTGGACTTCAGGGTCTGGGAAAGGGGCTTCGGGGAGGTGTGGCCTGCCAGATGAAG
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 GTGCTATGGTGGAGAAGAAGATTCTGATGAAAGTACACAGCAGTTTCATCGTGTCTCTGGCCTATGCGTT
 TGAAACCAAAGCCGACCTCTGTCTGGTGTGACCATCATGAACGGAGGTGACATCAGGTACCACATCTAC
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 GCCCATCCCCTGGCAGGAGGATGATCGAGACGGGCATCTTGGCGAGCTGAACGTGTGGCGCTCGGA
 CGGTGAGATGCCGGACGACATGAAGGGCATCTCCGGGGCTCCAGCTCCTCGTCCAAGTCAGGGATGTGT
 CTGGTTTCC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

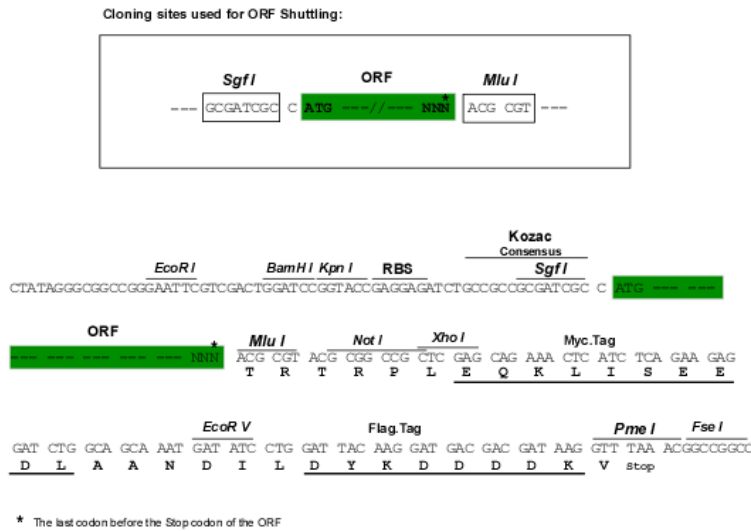
>RC402677 representing NM_002929
 Red=Cloning site Green=Tags(s)

MDFGSLETVVANSAFIAARGSFDSQSPSRDKKYLAKLKLPLPSKCESLRDSLSEFESVLCLEQPIGKK
 LFQQFLQSAEKHLPALWLDIEDYDTADNDLQPQKAQTILAQYLDPAKLFCFLDEGIVAKFKEGPVE
 IQDGLFQPLLQATLAHLGQAPFQEYLGSLYFLRFLQWKWLEAQPMGEDWFLDFRVLGKGGFGEVSACQMK
 ATGKLYACKKLNKKRLLKRGYQGMVEKKILMKVHSRFIVSLAYAFETKADLCLVMTIMNGDIRYHIY
 NVNEENPGFLEPRALFYTAQIICGLEHLHQRRIYVRDLKPENLLDNDGNVRISDLGLAVELLDGQSKTK
 GYAGTPGFMAPELLQGEEYDFSDYFALGVTLYEMIAARGPFRARGEKVENKELKHRIISEPVKYPDKFS
 QASKDFCEALLEKDPEKRLGFRDETCDKLRAHPLFKDLNWRQLEAGMLMPPFIPDSKTVYAKDIQDVGAF
 STVKGVAFDKTDTEFFQEFATGNCPIPWQEEMIETGIFGELNVWRSQGMPDDMKGISGGSSSSSKSGMC
 LVS

SGPTRRRLKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

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).

RefSeq:

[NP_002920](#)

RefSeq Size:

1689 bp

RefSeq ORF:

1692 bp

Locus ID:

6011

Cytogenetics:	13q34
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Chemokine signaling pathway, Endocytosis
MW:	61.9 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 rhodopsin and initiates its deactivation. Defects in GRK1 are known to cause Oguchi disease 2 (also known as stationary night blindness Oguchi type-2). [provided by RefSeq, Jul 2008]