

Product datasheet for **RC402680**

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:	V380D
Affected Codon#:	380
Affected NT#:	1139
Nucleotide Mutation:	GRK1 Mutant (V380D), Myc-DDK-tagged ORF clone of Homo sapiens G protein-coupled receptor kinase 1 (GRK1) as transfection-ready DNA
Effect:	Sionry nih blindness, Ouhi ype
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



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ORF Nucleotide Sequence:

>RC402680 representing NM_002929
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGATTT**CGGGTCTTTGGAGACCGTGGTGGCCA**ACTCTGCCTTCATCGCGCCCGAGGCAGCTTTGACG
 GCAGCAGCTCCCAACCC**TCCCGGACAAGAAGTACCTGGCCAAGCTCAAGCTGCCCCCGCTGTCCAAGTG**
 TGAGTCCCTCCCGCAGACGCTCAGCCTGGAGTTT**GAGAGTGTGTGCTTGGAGCAGCCATCGGCAAGAAG**
 CTCTTT**CAGCAGTTCTACAATCGGCAGAGAAGCACCTGCCGGCCCTGGAGCTCTGAAAAGACATCGAGG**
 ACTATGACACGGCAGACAATGACCTCCAGCCACAGAAGGCC**CAGACCATCTGGCCAGTACCTGGACCC**
 CCAGGCCAAACTCTTCTGCAGCTTCTGGATGAGGGGATAGTGGCGAAGTTT**AAGGAGGGCCTGTGGAG**
 ATCCAGGACGGGCTCTTCCAGCCCTGCTGCAGGCCACCCTGGCACACCTGGGCCAAGCCCCCTTCCAGG
 AGTACCTGGGCAGCCTGACTTCTGAGGTTCTGCAGTGAAGTGGCTGGAAGCCAGCCCATGGGGGA
 GGACTGGTTCTGGACTT**CAGGGTCTGGGAAAGGGGCTTCGGGGAGGTGTGGCCTGCCAGATGAAG**
 GCGACCCGCAAGCTGTATGCCTCAAGAAGCTGAACAAGAAGCGCTGAAGAAGAGGAAGGGCTACCAGG
 GTGCTATGGTGGAGAAGAAGATTCTGATGAAAGTACACAGCAGGTT**CATCGTGTCTCTGGCCTATGCGTT**
 TGAAACCAAAGCCGACCTCTGTCTGGT**GATGACCATCATGAACGGAGGTGACATCAGGTACCACATCTAC**
 AACGTGAATGAGGAGAACCCTGGCTTCCCGGAGCCGCGCCCTTCTACAGCGCAGATCATCTGCG
 GCCTGGAGCACCTGCACCAGAGCGGATCGTCTACCGCAGCTCAAGCCCAGAACGTGCTGTGGCAA
 TGACGGCAATGTCGGATCTCTGACCTTGGGCTGGCCGTGGAGCTGTGGACGGACAGAGCAAGACCAAG
 GGCTACGACGGGACCCAGGTTT**CATGGCCCCGAGCTCCTGCAGGGCAGGAGTACGACTTCTCCGTGG**
 ACTACTTTGCCCTGGGGACACCCTGTATGAGATGATTGCGCCAGAGGACCCTTCCGAGCCCTGGAGA
 GAAGGTGGAGAACAAGGAGCTGAAGCACCGGATCATCTCAGAGCCCGTGAAGTACCCTGATAAGTTCAGC
 CAGGCCAGCAAGGACTTCTGCGAGGCGCTGCTGGAGAAGGACCCGGAGAAGCGCCTGGGGTT**CAGAGATG**
 AGACCTGCGACAAGCTCCGTGCCACCCCTCTTCAAGGACCTTAACTGGAGGCAGCTGGAGGCTGGGAT
 GCTGATGCCCCCTTTCATCCAGACTCCAAA**ACTGTCTACGCAAAGGATATTCCAGGACGTGGGTGCCTTT**
 TCCACCGTCAAAGGTGTGGCCTTTGACAAAACAGACACAGAATTCTTCCAGGAATTTGCCACTGGCACT
 GCCCATCCCCTGGCAGGAGGATGATCGAGACGGGCATCTTGGCGAGCTGAACGTGTGGCGCTCGGA
 CGGT**CAGATGCCGGACGACATGAAGGGCATCTCCGGGGCTCCAGCTCCTCGTCCAAGTCAGGGATGTGT**
 CTGGTTCC

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

>RC402680 representing NM_002929
 Red=Cloning site Green=Tags(s)

MDFGSLETVVANSAFIAARGSFDGSSSQPSRDKKYLAKLKL**PPLSKCESLRDSL**SLEFESV**CLEQPIGK**
 LFQQLQSAEKHLPAL**ELWKDIEDYDTADNDLQPQKAQ**TILAQYLD**PQAKLFC**SFLDEGIVAKFKEGPVE
 IQDGLFQ**PLLQATLAHLGQAPFQEY**LGSYFLRFLQ**WKWLEAQ**PMGEDWFLDFRVLGKG**GFGEVSACQMK**
 ATGKLYACKKLNK**RLLKRRKGYQGAMVEK**KILMKVHSR**FIVSLAYAFETKADL**C**L**VMTIMNGGDIRYHIY
 NVNEENPGFPEPRALFYTAQ**II**CGL**EH**LHQRRI**VYRDLK**PENVLLDNDGN**VRI**SDLGLAV**EL**LDGQSKTK
 GYAGTPGFMAPELLQ**GEEYDF**SVDYFALGDTL**YEMIA**ARGPFRARGEK**VENKELKHRI**ISEPVKY**PKFS**
 QASKDFCEAL**LEKDPEKRLGFRDETCDK**LRAHPLFKDLN**WRQLEAGMLMPPF**IPDSKTVYAKDIQDV**GAF**
 STVKGVA**FDKTDTEFFQEFATGNCP**IPWQEEM**ETGIFGELNV**WRS**DGQMPDDMKGI**SGGSSSSSK**SGMC**
 LVS

SGP**TRTRRLEQKLI**SEEDLAAND**ILDYKDDDDK**V

Restriction Sites:

Sgfl-MluI

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]