

Product datasheet for **RC207582**

RGL2 (NM_004761) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RGL2 (NM_004761) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RGL2
Synonyms:	HKE1.5; KE1.5; RAB2L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC207582 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTCCCGGGCCCTGCGGCTGCTTTTGGACACGAGCCCCCGGGGAGTCGTACTGAGCAGCTTCC
 GAAGCCGGGACCCGAAGAGGGTGGGGGCCAGGTGGCCTGGTCGTGGGCGGGGGCAGGAGGAAGAGGA
 GGAGGAAGAAGAAGAGGCCCTGTGTCCGTCTGGGATGAGGAGGAGGATGGTGCCGTGTTTACCGTCACA
 AGCCGCCAATATCGACTCTTGATCCCTTGGTCCCTATGCCTCCCCACGTTCTCCCGACGGCTCCGAG
 CTGGCACTCTGGAGGCCCTGGTCAGACACCTACTGGATACCCGGACATCAGGGACTGATGTGAGCTTCAT
 GTCAGCCTTCTGGTACCCACCGGCCCTCACCTCCACGCTGCCTTGTAGGGCTTATGGCTGACAGG
 CTGGAAGCCCTGAATCTCATCTACCGACGAAGTACAGAGGACAACAGAGGTAGCCATCTCTGTACTGT
 CAACCTGGCTGGCCTCTACCCCTGAGGATTTTGGCTCTGAGGCCAAGGGTCACTTGACCGGCTTGAGAG
 CTTCTTACTTTCAGACAGGGTATGCAGCAGGGAAGGGTGTGGGGGGGCGAGCGCTGACCTCATCCGCAAT
 CTCGGGTCCCGGGTGGACCCCCAGGCCCCCGACCTTCTAAGCCCTGGCCCTCCCGGGGATCCCCCTG
 CTGACCCACGGATGTCCTGGTGTCTCGCTGACCACCTTGCCGAACAGCTGACCTGCTAGATGCGGA
 ACTTTTTCTCAATTTGATCCCCTCTCAGTGCCTGGGAGGCCTGTGGGGTACAGAGACCGGCCAGGACAT
 TCTCACCTCTGCCATCTGTCCGAGCTACTGTCACACAGTTTAAACAAGGTGGCAGGGCAGTGGTTAGTT
 CTGTCTGGGGGCTACTTCCACTGGAGAGGGACCTGGGGAGGTGACCATACGGCCACTCCGTCACCCACA
 GAGGGCCCGGCTCCTGGAGAAGTGGATCCGCGTGGCAGAGGAGTGCCGGCTGCTCCGAAACTTCTTTCA
 GTTTATGCCGTGGTGTGAGCCCTGCAGTCCAGCCCATCCACAGGCTTCGGGCAGCCTGGGGGGAAGCAA
 CCAGGGACAGCCTCAGAGTCTTTTCCAGCCTCTGCCAGATTTTCTCCGAGGAGGATAATTATTTCCAGAG
 TCGGGAGCTGCTCGTGCAGGAGGTGAAGCTGCAGTCTCCTCTGGAGCCACACTCCAAGAAGGCCCGGAGG
 TCTGGCTCCCGGGTGGGGGTGGTCCCATACCTTGGCACCTTCTGAAGGACCTTGTGATGCTGGATG
 CAGCCTCAAGGATGAGTTGGAGAATGGATACATCAATTTTGAAGCGGAGGAAGGAGTTTGCAGTCTCT
 TTCTGAGTTGCGACGGCTCCAGAATGAATGTCGTGGCTATAACCTCCAACCTGACCATGATATCCAGAGG
 TGGCTACAGGGGCTCCGGCCACTGACAGAGGCTCAGAGCCATCGTGTATCCTGTGAGGTGGAGCCACCTG
 GTTCCAGTGACCTCCTGCCCCACGGGTGCTTCGGCCAACATTGGTCATCTCGCAGTGGACAGAGGTTTT
 GGGCTCTGTTGGGGTCCCTACCCGCTTGTGCTCTGTGACCGGCCAGTACTGGGGGAGATGAGGCGCT
 ACAACTCTGCTCCTCTGCTGACTCGGCTGGCCAGCAGATGAAGTGGCCATCTGTCTCGTCACTAGACT
 CTGCCCTTGAAAGCAGTCCATCCCTGCACAGTCCAGTACCCAGCCACCTCTCCCACCGCCTCCTC
 CCCTAGGCCTTCTCGAGGTACCCGCCGCTCAGCCTCCTGTGGCTCCCGCTGAGTGGGGGTGAGAAAGAG
 GCCTCCGGGGGACTGGATATGGGGGAGAGGGATCTGGGCCAGGGGCTCTGATTGCCGTATCATCCGAG
 TCCAGATGGAGTTGGGGGAAGATGGCAGTGTCTATAAGAGCATTTTGGTGAAGCCAGGACAAGGCTCC
 AAGTGTATCAGTCGTCTCTTAAGAAAAACAATCGTACTCTGCAGTGGCTTTCAGAGTATGAGCTGGTA
 CAGCTGCTACAGGGGAGCGAGAGCTGACTATCCAGCCTCGGCTAATGTATTCTACGCCATGGATGGAG
 CTTACACGATTTCTCCTGCGGCAGCGGCAAGGTCTCTACTGCTACACCTGGCGTACCAGTGGCC
 GTCTGCCTCAGGAACCTCCGAGTGAGGGAGGAGGGGCTCCTTTCCAGGATCAAGGCCACAGGGAGG
 AAGATTGCACGGGCACTGTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207582 protein sequence
Red=Cloning site Green=Tags(s)

MLPRPLRLLLDTSPPGGVVLSSFRSRDPEEGGGPGLVGGGQEEEEEEEEAPVSVWDEEEDGAVFTVT
SRQYRPLDPLVPMPPRSTRRLRAGTLEALVRHLLDTRTSGTDVSMFLATHRAFTSTPALLGLMADR
LEALESHPTEDELERTTEVAISVLSTWLASHPEDFGSEAKGQLDRLESFLLQTGYAAGKGVGGGSADLIRN
LRSRVDPPADLPKPLALPGDPPADPTDVLVFLADHLAEQLTLLDAELFLNLIPSQCLGGLWGHDRDPGH
SHLCPSVRATVTQFNKVAGAVVSSVLGATSTGEGPGEVTIRPLRPPQARLLEKWIRVAEECRLLRNFSS
VYAVVSALQSSPIHRLRAAWGEATRDSLRFVSSLCQIFSEEDNYSQSRELLVQEVKLQSPLEPHSKKAPR
SGSRGGGVVYPYLGTFKDLVMLDAASKDELENGYINFDKRRKEFAVLSELRRQLQNECRGYNLQPDHDIQR
WLQGLRPLTEAQSHRVSCEVEPPGSSDPPAPRVLRPTLVISQWTEVLGSGVPTPLVSCDRPSTGGDEAP
TTPAPLLTRLAQHMKWPSVSSLDLSALESSPSLHSPADPSHLSPASSPRPSRGHRRSASCSPSGGAE
ASGGTGYGGEGSGPGASDCRIIRVQMELEGDSVYKSILVTSQDKAPSVISRVLKKNNRDSAVASEYELV
QLLPGERELTIPASANVFYAMDGASHDFLLRQRRRSSTATPGVTSGPSASGTPPSEGGGGSFPRIKATGR
KIARALF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6229_c02.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_004761

ORF Size: 2331 bp

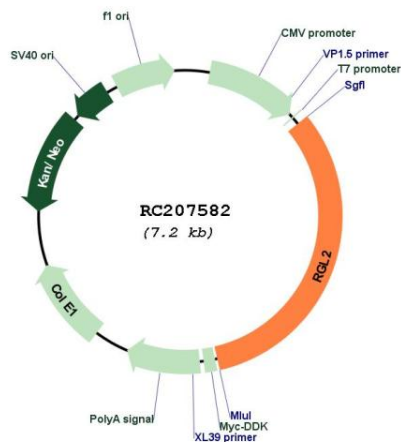
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

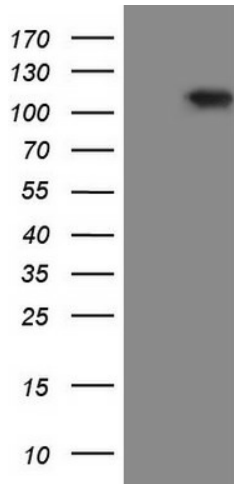
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_004761.5
RefSeq Size:	3362 bp
RefSeq ORF:	2334 bp
Locus ID:	5863
UniProt ID:	O15211
Cytogenetics:	6p21.32
Domains:	RA, RasGEFN, RasGEF
Protein Families:	Druggable Genome
MW:	83.5 kDa
Gene Summary:	Probable guanine nucleotide exchange factor. Putative effector of Ras and/or Rap. Associates with the GTP-bound form of Rap 1A and H-Ras in vitro (By similarity).[UniProtKB/Swiss-Prot Function]

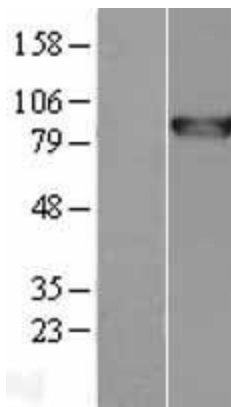
Product images:



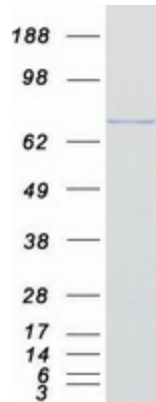
Circular map for RC207582



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RGL2 (Cat# RC207582, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RGL2 (Cat# [TA808391])(1:2000). Positive lysates [LY417774] (100ug) and [LC417774] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417774]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207582 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RGL2 protein (Cat# [TP307582]). The protein was produced from HEK293T cells transfected with RGL2 cDNA clone (Cat# RC207582) using MegaTran 2.0 (Cat# [TT210002]).