

## Product datasheet for **RC223082**

### **RGPD5 (NM\_005054) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RGPD5 (NM_005054) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RGPD5
Synonyms:	BS-63; BS63; HEL161; RGP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223082 representing NM_005054 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGCGCAGCAAGGCCGATGTGGAGCGGTACGTCGCCTCGGTGCTGGGTCTCACCCCGTCGCCTCGAC  
AGAAGTCAATGAAAGGATTCTATTTTGCAAAGCTGTATTATGAAGCTAAAGAATATGATCTTGCTAAAAA  
ATACATATGTACTTACATTAATGTGCAAGAGAGGGATCCCAAAGCTCACAGATTTCTGGGTCTTCTTTAT  
GAATTGGAAGAAAACACAGAGAAAGCCGTTGAATGTTACAGGCGTTCAGTGAATTAACCCAACACAAA  
AAGATCTTGTGTTGAAGATTGCAGAATTGCTTTGTA AAAATGATGTTACTGATGGAAGAGCAAAATACTG  
GGTCGAAAGAGCAGCAAACTTTTCCCAGGAAGTCCTGCAATTTATAAACTAAAGGAACAGCTTCTAGAT  
TGTGAAGGTGAAGATGGATGGAATAAACTTTTGACTTGATTTCAGTCAGAACTTTATGTAAGACCTGATG  
ACGTCCATGTGAACATCCGGCTAGTGGAGTTGTATCGCTCAACTAAAAGATTGAAGGATGCTGTGGCCCA  
CTGCCATGAGGCAGAGAGGAACATAGCTTTGCGTTCAAGTTTAGAGTGGAAATTCGTGTGTTGTACAGACC  
CTTAAGGAATATCTGGAGTCTTTACAGTGTGGAGTCTGATAAAAAGTACTGGCAAGCAACCAATACAG  
ACTTACTGCTGGCCTATGCTAATCTTATGCTTCTTACGCTTTCCACTAGAGATGTGCAGGAAAATAGAGA  
ATTACTGGAAAGTTTTGATAGTGTCTTTCAGTCTGCGAAATCTTCTTTGGGTGGAATGATGAAGTGTCA  
GCTACTTTCTTAGAAATGAAAGGACATTTCTATATGATGCTGGTCTCTGCTCTTGAAGATGGGTCAGC  
ATGGTAATAATGTTCAATGGCGAGCTCTTCTGAGCTGGCTGCATTGTGCTATCTCATAGCATTTTCAGGT  
TCCAAGACCAAAGATTAATTAAGAGAAGTAAAGCTGGACAAAATCTGCTGGAATGATGGCCTGTGAC  
CGACTGAGCCAATCAGGGCACATGTTGCTAAGCTTAAGTCGTGGCAAGCAAGATTTCTAAAAGAGGTTG  
TTGAAACTTTTGCCAACAAAATTGGGCAGTCTGCGTTATATGATGCTCTGTTTTCTAGTCAGTCACCTAA  
GGATACATCTTTCTTGGTAGCGATGATATTGAAAAAATTGATGTACAAGAACCAGAGCTTGAAGATTTG  
GCTAGATACGATGTTGGTGTCTATTCGAGCACATAATGGTAGTCTTCAGCATCTTACTTGGCTTGGCTTAC  
AGTGAATTCATTGCCTGCTTACCTGGAATCCGAAAATGGCTAAAACAGCTTTTCCATCGTTTGCCCA  
TGAACCTCAAGCTTGAACAAAATGCGCCTGAATCAATATGATTTTAGATCTTGAAGTATTTCTCTT



[View online »](#)

GGAGTAGTATATACCAGCCAATTACAATTAAGGAGAAATGTAATTCTCACCATAGCTCCTATCAGCCGT  
TATGCCTGCCCTTCTCTGTGTAAACAGCTTTGTACAGAAAGACAAAACTTGGTGGGATGCGGTTTG  
TACTCTGATTCACAGAAAAGCAGTACCTGGAACTTGGCAAAATGAGACTTCTAGTTTACAGATGAAATA  
AACACTTAAGAGCCCAGGAAAAACATGGCCTTCAACCTGCTCTGCTGTACATTGGGCAAAATACCTTC  
AGAAAACGGGCAGCGGTCTAATCTTTTTATGGTCAACTAGAATACATAGGGAGAAGTGTTCATTATTG  
AAAGAAAGTTTTGCCATTGTTGAAGATAATAAAGAAGAACAGTATCTGAACTATTGATCCTCTGTTT  
AAACATTTTCATAGTGTAGACATTCAGGCATCAGAAATGTTGAATATGAAGAAGACGCACACATACTT  
TTGCTATGTTGGATGCAGTAAATGGAAATATAGAAGATGCTGTGACTGCTTTTGAATCTATAAAAAAGTGT  
TGTTTCTATTGGAATCTTGCACTGATTTTTACAGGAAGGCAGAAGACATTGAAAAATGATGCCCTTTCT  
CCTGAAGAACAAGAAGAAATGCAGAAATTAATCTGACAAAGACCAGGGACTACCTAATAAAGATTATAGATG  
ACGGTGATTCAAATCTTTCAGTGGTCAAGAAATGCTGTGCCCTGGAGTCTGTAAAACAGATGCTTAA  
TTCAGTCATGCAGGAACTCGAAGACTATAGTGAAGGAGTCTCTCTATAAAAAATGGTCTTTTGCAGAAAT  
GCAGATTCAGAAATAAACATTTACACCGTCTCCTACCAAAATTTCACTATCACCAAGTAAAAGTTACA  
AGTATTCTCCGAAACACCCTCGATGGACAGAAGATCGGAATCTTTACTGAATATGATTTGCCAACA  
AGTAGAGGCCATTAAGAAAGAAATGCAGGAGTTGAACTAAATAGCAGTAAGTCAGCATCCCGTCATCGT  
TGGCCACAGAGAATTATGGACCAGACTCGGTGCCTGATGGATATCAGGGGTACAGACATTTTCATGGGG  
CTCCACTAACAGTTGCAACTACTGGCCCTTCAGTATATTATAGTCAGTCACCAGCATATAATTTCCAGTA  
TCTTCTCAGACCAGCAGCTAATGTTACTCCACAAAGGGTCTTCTAATACAGAAATTAAGTCAACCAAA  
GAAGGATTTTCCATCCCTGTGTCTGCTGATGGATTTAAATTTGGCATTTCGGAACCAGGAAATCAAGAAA  
AGAAAAGGGAAAAGCCTCTTGAAGATGATACTGGCTTCCAGGCTCAGGATATTAGTGGCCGGAAGAAGGG  
CCGTGGTGTGATTTTTGGCCAAACAAGTAGCACTTTTACATTTGCAGATGTTGCAAAATCAACTTCAGGA  
GAAGGATTTGATTTGGCAAAAAGACCTCAATTTCAAGGGATTTTCAAGTGTGAGAAAAATTTCTCT  
CATCACGATACGGTAAAATGGCCAATAAAGCAACACTCCGGTGCATTTGAGAAAGATGATGATGCCTA  
TAAGACTGAGGACAGCGATGACATCCATTTTGAACCAAGTATTCAAATGCCTGAAAAAGTGAATTTGTA  
ACAGGAGAAGAAGGTGAAAAAGTTCTGTATTACAGGGGGTAAAACTATTTAGATTTGATGCTGAGGTAA  
GGCAGTGGAAAGAAAGGGCTTGGGGAACCTAAAAATTTCTCAAAAACGAGGTCAATGGCAAACTAAGAAAT  
GCTGATGCGAAGAGAACAAGTACTAAAAGTGTGTGCTAATCATTGGATAACGACTACAATGAACCTGAAG  
CCCCTCTGATCAGATAGAGCATGGATGTGGTCAAGCAGTATTTCTCTGACGGTGTGCCAACTAG  
AGCGGTTGGCAGCAAAATTTAAAACACCAGAGCTGGCTGAAGAATTAAGCAGAAATTTGAGGAATGCCA  
GCGGCTTCTGTTAGACATACCCTTCAACTCCCATAAACTTGTAGATACTGGCAGAGCTGCCAAGTTA  
ATACAGAGAGCTGAAGAAATGAAGAGTGGACTGAAAGATTTCAAAACATTTTGGCAAAATGATCAACAA  
AAGTCACTGAGGAAGAAAATAAGGGTTCAGGTACAGGTGCGGCCGTGCCTCAGACACAACAATAAAACC  
CAATGCTGAAAACACTGGGCCACATTAGAATGGGATAACTATGACTTAAGGGAAGATGCTTTGGATGAT  
AGTGTCAGTAGTACGTACATGCTTCTCCATTGGCAAGTAGCCCTGTGAGAAAAATCTTTCCGCT  
TTGATGAGTCAACAACAGGATCTAACTTCAGTTTTAAATCTGCTTTGAGTCTATCTAAGTCTCCTGCCAA  
GTTGAATCAGAGTGGGACTTCAGTTGGCACTGATGAAGAAATCTGTTGTTACTCAAGAAGAAGAGAGAGAT  
GGACAGTACTTTGAACCTGTTGTTCTTACCTGATCTAGTTGAAGTATCCAGTGGTGGGAAAAATGAAC  
AAGTTGTTTTAGTCACAGGGCAGAAATCTACAGATATGATAAAGATGTTGGTCAATGAAAGAAAGGGG  
CATTGGTGATATAAAGATTTTACAGAATTATGATAATAAGCAAGTTCGTATAGTGATGAGAAAGGACCAA  
GTATTAATAAATTTGTGCCAATCACAGAATAACTCCAGACATGAGTTTGAATAATGAAAGGGACAGAAA  
GAGTATGGGTGTGGACTGCATGTGATTTTGCAGATGGAGAAAGAAAGTAGAGCATTTAGCTGTTGTTTT  
TAAACTACAGGATGTTGCAGACTCGTTTAAAGAAATTTTTGATGAAGCAAAAACAGCCCAGGAAAAAGAT  
TCTTTGATAACACCTCATGTTTCTCGTCAAGCACTCCCAGAGAGTACCATGTGGCAAAATTTGCTGTAG  
CTATATTAGAAGAAACCACAAGAGAGAGGACAGATGTTATTCAGGGTGTGATGTAGCAGATGCAGCTTC  
AGAAGTTGAAGTGTCTAGCACATCTGAAACAACAACAAAAGCAGTGGTTTCTCTCCAAAGTTTGTATTT  
GTTTCAGAGTCTGTTAAAAGATTTTGTAGTGAAGAAATCAAAACCATTTGATTTGGCAACAGTCTCG  
CCACTGGGCTCTTGTGTTGATTTAGTTTTAATGCACCTTTGAAAAGTAAACATAGTGAAACTAGTTCAGT  
AGCCCAGAGTGGATCTGAAAGCAAAGTGGAACTAAAAATGTGAAGTGTCAAAGAACTCTGATATCGAA  
CAGTCTTCAGATAGCAAAGTCAAAAATCTCTGCTTCTTTCCAACGGAAGAATCTTCAATCAACTACA  
CATTTAAAACACCAGAAAAGGAGCCTCCATTATGGCATGCTGAATTTACCAAAGAAGAAATGGTTTCAGAA  
GCTCCGTTCCACCACAAAAGTGCAGATCACTTAAACGGCCTGCTTCGGGAAATAGAGGCAACCAATGCA  
GTCCTTATGGAGCAAATTAAGCTTCTCAAAAGTGAATAAGAAGATTGAAAGGAATCAAGAGCGAGAGA

AGTCTGCAGCTAACCTGGAATACTTGAAGAACGCTTGCTGCAGTTCATTTTCTTGAAGCCAGGTAGTGA  
 AAGAGAGAGACTTCTTCTGTTATAAATACGATGTTGCAGCTCAGCCCTGAAGAAAAGGGAAAACCTGCT  
 GCGGTTGCTCAAGATGAGGAAGAAAATGCTTCCCGTTCTTCTGGA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC223082 representing NM\_005054  
 Red=Cloning site Green=Tags(s)

MRRSKADVERYVASVLGLTPSPRQKSMKGFYFAKLYYEAKYDLAKKYICTYINVQERDPKAHRFLGLLY  
 ELEENTEKAVECYRRSVELNPTQKDLVLKIAELLCKNDVTDGRAKYWVERAAKL FPGSPA IYKLEQQLD  
 CEGEDGWNKLFDLIQSELYVRPDDVHVNI RLV ELYRSTKRLKDAVAHCHEAERNIALRSSLEWNSCVVQT  
 LKEYLES LQCLESDKSDWQATNTDLLLAYANMLLTLSTRDVQENRELLESFDSALQSASLGGNDELS  
 ATFLEMKGHFYMYAGSLLKMGQHGNNVQWRALSELAALCYLIAFQVPRPKIKLREGKAGQNLLEMMA CD  
 RLSQSGHMLLSL SRGKQDFLKEVVET FANKIGQSALYDALFSSQSPKDT SFLGSDDIGKIDVQPEPEL EDL  
 ARYDVGAIRAHNGSLQHLTWLGLQWNSLPALPGIRKWLKQLFHRLPHETSRLTNAPE S ICILDLEVFL L  
 GVYYTSHLQLKEKCNSHSSYQPLCLFPVCKQLCTERQKSWWDVAVCTL IHRKAVPGNLAKLRLLVQHEI  
 NTLRAQEKHGLQPALLVHWAKYLQKTGSLNSFYGQLEYIGRSVHYWKKVPLLLKIIKKN SIPEPIDPLF  
 KHFHSDVIQASEIVEYEEDA HITFAMLD AVNGNIEDAVTAFESIKSVVSYWNLALIFHRKAEDIENDALS  
 PEEQEECRNYLTKTRDYLIKIIDGDSNL SVVKKLPVPLESVKQMLNSVMQELEDYSEGGPLYKNGSLRN  
 ADSEIKHSTPSPTKYSLSPSKSYKYSPE T PPRWTE DRNSLLNMI CQQVEAIKKEMQELKLNSSKSASRHR  
 WPTENYGPDSVPDGYQGSQTFHGAPLTVATTGPSVYYSQSPAYNSQYLLRPAANVTPTKGSNTEFKSTK  
 EGF S I PVSADGFKFGISEPGNQEKREKPLENDTGFQAQDISGRKKGRGVIFGQTSSTTFADVAKSTSG  
 EGFQFGKDLNFKGFSGAGEKLFSSRYGKMANKANTSGDFEKDDDAYKTEDSDDIHFEPPVQMPKEVELV  
 TGEEGEKVLYSQGVKLF RFD A E V R Q W K E R G L G N L K I L K N E V N G K L R M L M R R E Q V L K V C A N H W I T T M N L K  
 PLSGSDRAWMWSASDFSDGAKLERLA AKFKTPELAEFEKQKFEECQRLLLDIPLQTPHKLVD TGRAAKL  
 IQRAEEMKSGLKDFKFTLNDQTKVTEENKGS GTGAAGASDTTIKPNAENTGPTLEWDNYDLREDALDD  
 SVSSSVHASPLASSPVRKNLFRFDESTTGSNFSFKSALSLSKSPAKLNQSGTSVGTDEESVVTQEEERD  
 GQYFEPVVPLPDLVEVSSGEENEQVVF SHRAEIYRYDKDVGQWKERIGDIKILQNYDNKQVRIVMRRDQ  
 VLKLCANHRITPDMSLQNMKGTERVWVWTACDFADGERKVEHLAVRFKLQDVADSFKKIFDEAKTAQEKD  
 SLITPHVSRSSTPRESPCGKIAVAILEETTRET DVIQGDVADAASEVEVSSTSETTTKAVVSPPKFVF  
 VSESVKRIFSSEKSKPFVFGNSSATGSLFGFSFNAPLKSNNSETSSVAQSGSESKVEPKKCELSKNSDIE  
 QSSDSKVKNLSASFPTTESSINYTFKTPEKEPPLWHAETKEELVQKLRSTTKSADHLNGLLREIEATNA  
 VLMEQIKLLKSEIRRLERNQEREKSAANLEYLKNVLLQFIFLKPGERERLLPVINTMLQLSPEEKGLA  
 AVAQDEEENASRSSG

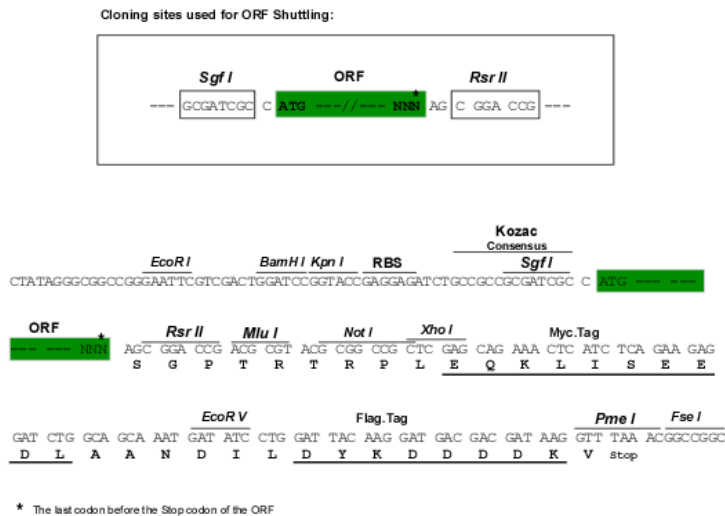
SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8046\\_d05.zip](https://cdn.origene.com/chromatograms/mk8046_d05.zip)

**Restriction Sites:**

Sgfl-RsrII

**Cloning Scheme:**


**ACCN:** NM\_005054

**ORF Size:** 5295 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:**

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\\_005054.3](#)

**RefSeq Size:** 7182 bp

**RefSeq ORF:** 5298 bp

**Locus ID:** 84220

**UniProt ID:** [Q99666](#)

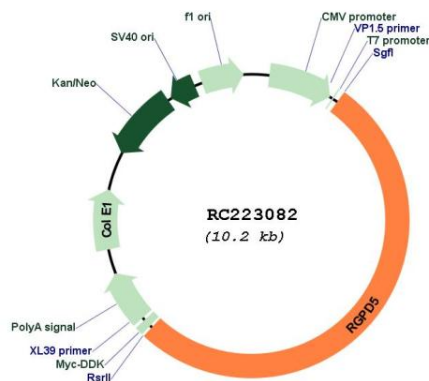
**Cytogenetics:** 2q13

**Protein Families:** Druggable Genome

**MW:** 198.7 kDa

**Gene Summary:** RAN is a small GTP-binding protein of the RAS superfamily that is associated with the nuclear membrane and is thought to control a variety of cellular functions through its interactions with other proteins. This gene shares a high degree of sequence identity with RANBP2, a large RAN-binding protein localized at the cytoplasmic side of the nuclear pore complex. It is believed that this RANBP2 gene family member arose from a duplication event 3 Mb distal to RANBP2. Alternative splicing has been observed for this locus and two variants are described. Additional splicing is suggested but complete sequence for further transcripts has not been determined. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC223082