

## Product datasheet for **RG219795**

### **GCC2 (NM\_181453) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GCC2 (NM_181453) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GCC2
Synonyms:	GCC185; RANBP2L4; REN53
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219795 representing NM_181453 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGGATCTTGTTCAAGATGGGGTGGCTTCACCAGCTACCCCTGGGACCGGAAATCTAAGCTGGAAA  
CATTGCCCAAAGAAGACCTCATCAAGTTTGCCAAGAAACAGATGCTAATACAGAAAGCTAAATCAAG  
GTGTACAGAATTGGAGAAAGAAATTGAAGAACTCAGATCAAACCTGTTACTGAAGGAAGCTGGTATATT  
ATTAAGGCATTAAGTGAACGTCTGGATGCTCTTCTCTGGAAAAAGCAGAGACTGAGCAACAGTGTCTTT  
CTCTGAAAAAGGAAAATATAAAAATGAAGCAAGAGTTGAGGATTCTGTAACAAAGATGGGAGATGCACA  
TAAGGAGTTGGAACAATCACATATAAACTATGTGAAAGAAATGAAAATTTGAAAAATGAGTTGATGGCA  
GTACGTTCCAAATACAGTGAAGACAAAGCTAATTACAAAAGCAGCTGGAAGAAGCAATGAATACGCAAT  
TAGAACTTTCAGAACAACCTAAATTTTCAGAACAACCTCTGAAGATAATGTTAAAAAAGTACAAGAAGAGAT  
TGAGAAAATTAGGCCAGGCTTTGAGGAGCAAAATTTTATATCTGCAAAAAGCAATTAGACGCTACCACTGAT  
GAAAAGAAGGAAACAGTTACTCAACTCCAAAATATCATTGAGGCTAATTCAGCATTACCAAAAAATA  
TTAATAGTTTGCAGGAAGAGCTTTACAGTTGAAAGCTATACACCAAGAAGAGGTGAAAGAGTTGATGTG  
CCAGATTGAAGCATCAGCTAAGGAACATGAAGCAGAGATAAATAAGTTGAACGAGCTAAAAGAGAAGCTTA  
GTAAAACAATGTGAGGCAAGTAAAAGAACATCCAGAAGAAATATGAATGTGAGTTAGAAAATTTAAGGA  
AAGCCACCTCAAATGCAACCAAGACAATCAGATATGTTCTATTCTCTTGCAAGAAAATACATTTGTAGA  
ACAAGTAGTAAATGAAAAAGTCAAAACCTTAGAAGATACCTTAAAAAGAACTTGAATCTCAACACAGTATC  
TAAAAAGATGAGGTAACCTATATGAATAATCTTAAGTTAAAACTTGAATGGATGCTCAACATATAAAGG  
ATGAGTTTTTTCATGAACGGGAAGACTTAGAGTTTAAATTAATGAATTACTAGCTAAAGAAGAACA  
GGGCTGTGTAATTGAAAAATTAATCTGAGCTAGCAGTTTAAATAAACAGTTTTGCTATACTGTAGAA  
CAGCATAACAGAGAAGTACAGAGTCTTAAGGAACAACATCAAAAAGAAAATATCAGAACTAAATGAGACAT  
TTTTGTCAGATTCAGAAAAGAAAATTAACATTAATGTTTGAATACAGGCTTAAAGGAACAGTGTGA  
AAACCTACAGCAAGAAAAGCAAGAAGCAATTTTAAATTATGAGAGTTTACGAGAGATTATGAAAATTTTA



CAACAGAACTGGGGAATCTGCTGAAAAATAAGTCAAGAGTTCGAATCAATGAAGCAACAGCAAGCAT  
CTGATGTTTCATGAACTGCAGCAGAAAGCTCAGAACTGCTTTTACTGAAAAAGATGCCCTTCTCGAACTGT  
GAATCGCCTCCAGGGAGAAAAATGAAAAGTTACTATCTCAACAAGAATTGGTACCAGAACTTGAAAAATACC  
ATAAAGAACCTTCAAGAAAAAGATGGAGTATACTTACTTAGTCTCAGTCAAAGAGATACCATGTTAAAAG  
AATTAGAAGGAAAGATAAATTCTTACTGAGGAAAAAGATGATTTTATAATAAACTGAAAAATCCCA  
TGAAGAAATGGATAATTTCCATAAGAAAATGTGAAAGGGAAGAAAGATTGATTCCTGAACTTGGGAAGAAA  
GTAGAGCAAACAATCCAGTACAACAGTGAACAGCAAAAAGGTAATGAATTAACAGGAGGACTAGAGG  
AGACTTTAAAAGAAAAGGATCAAAATGACCAAAAAGTAACTAGAAAAACTTATGGTTCAAATGAAAAGTTCTCTC  
TGAAGACAAGAAGTATTGTCAGCTGAAGTGAAGTCTCTTTATGAGGAAAAACAATAAACTCAGTTCAGAA  
AAAAACAGTTGAGTAGGGATTTGGAGTTTTTTTTGTCTCAAAAAGAAGATGTTATCCTTAAAGAACATA  
TACTCAATTAGAAAAGAACTTCAGTTAATGGTTGAAGAGCAAGATAATTTAAATAAACTGCTTAAAA  
TGAGCAAGTTCAGAAGTATTTGTTAAAAGTCAAGTGTATGGTTTTCTTAAAGAAATGGGATCAGAAGTT  
TCAGAAGACAGTGAAGAGAAAGATGTTGTTAATGTCCTACAGGCAGTCGGTGAATCCTTGGCAAAAAATA  
ATGAGGAAAAATGCAACCTGGCTTTTCAGCGTGATGAAAAAGTATTAGAGTTAGAAAAAGAGATTAAGTG  
CCTTCAAGAAGAGAGTGTAGTTCAGTGTGAAGAACTTAAGTCTTTATTGAGAGACTATGAGCAAGAGAAA  
GTTCTCTTAAGGAAAAGATTAGAAGAAATACAGTCAGAAAAAGAGGCCCTGCAGTCTGATCTTCTAGAAA  
TGAAGAATGCTAATGAAAAACAAGGCTTGAAAATCAGAATCTTTTAATCAAGTTGAAGAAGTATCTCA  
AACATGTAGCAAAAGTGAATCCATAATGAAAAAGAAAAATGTTTTATAAAGGAACATGAAAACCTAAAG  
CCACTACTAGAACAAAAAGAATTACGAGATAGGAGAGCAGAGTTGATACTATTAAGGATTCCTTAGCAA  
AATCACCTTCTGTAAAAAATGATCCTCTGTCTTCAGTAAAAGAGTTGGAAGAAAAATAGAAAATCTGGA  
AAAAGAAATGCAAGAAAAAGGAGGAGAAAAATAAATAAGATAAAATAGTTGCCGTAAGGCCAAAGAAAAGAA  
CTAGATTCCAGCAGAAAAAGAGACCCAGACTGTGAAGGAAGAAGTGAATCTCTTCGATCAGAAAAAGGACC  
AGTTATCTGCTCCATGAGAGATCTCATTCAAGGAGCAGAAAAGCTATAAGAATCTTTTATTAGAATATGA  
AAAGCATCAGAGCAACTGGATGTGAAAAAGAAGCTGCTAATAATTTTGGAGCATCGTATTGAAGACTT  
ACAAGACAATTAAGAAATTCGACTTTGCAAGTGTGAAACAATAAATCTGATAATGAAGATCTCCTGGCTC  
GTATTGAGACATTACAGTCTAATGCCAAATTAATAGAAGTACAGATTTTGAAGTCCAGAGAGCCAAAGC  
AATGGTAGACAAAGAATTAGAAGCTGAAAACTTCAGAAAAGAACAGAAGATAAAGGAACATGCCACTACT  
GTAATGAACTTGAAAGACTTCAGGTACAACCTCAAAAGGAAAAGAAACAGCTTCAGAAAACCATGCAAG  
AATTAGAGCTGGTTAAAAGGATGCCCAACAACCACATTGATGAATATGGAAATAGCTGATTATGAACG  
TTTGATGAAAGAACTAAATCAAAAGTAACTAATAAAAAACAAGATAGAAGATTTGGAGCAAGAAATA  
AAAATTCAAAAACAGAAACAAGAAACCCTACAAGAAGAAATAACTTCATTACAGTCTTCAGTACAACAAT  
ATGAAGAAAAAACACCAAAATCAAGCAATTGCTTGTGAAAACCAAAAAGGAACTGGCAGATTCAAGCA  
AGCAGAAACTGATCACTTAATACTTCAAGCATCTTTAAAAGGTGAGCTGGAGGCAAGCCAGCAGCAAGTA  
GAAGTCTATAAAATACAGCTGGCTGAAATAACATCAGAGAAGCACAAAATCCACGAGCACCTGAAAACCT  
CTGCGGAACAGCACCAGCGTACGCTAAGTGCATACCAGCAGAGAGTGACAGCACTACAGGAAGAGTGCCG  
TGCTGCCAAGGCAGAACAAAGCTACTGTAACCTCTGAATTCGAGAGCTACAAAAGTCCGAGTTTCAATGTT  
CTAAAACAACAGAAAAATAAATCTATGTCTCAGGCTGAACTGAGGGCGCTAAACAAGAAAGGGAACATC  
TGGAAATGCTGATTGACCAGCTAAAAATCAAATACAAGATAGCCAAAATAACTTACAGATTAATGTATC  
TGAATTCAAACATTGCAGTCTGAACATGATACACTGCTAGAAAGGCACAACAAGATGCTGCAGGAAACT  
GTGTCCAAAGAGCGGAACTCCGGGAAAAATGTGTTCAATACAGTCAGAGAACATGATGATGAAATCTG  
AACATACACAGACTGTGAGTCAAGTAAATCCCAAGACGAGTCTTTCGAAATAGCTTCCGAGATCAAGT  
GCGACATTTGCAGGAAGAACACAGAAAGACAGTGGAGACATTACAGCAGCAGCTCTCCAAGATGGAAGCA  
CAGCTCTTCCAGCTTAAGAATGAACCGACCACAAGAAGCCAGTTTCTCTCAACAATCTTTGAAGAACC  
TTCAGAAAGGAGAAACACAGACCTCCCGCTTCTAGACATGCACACTGTAACCCGGGAAGAGGGAGAAGG  
CATGGAGACAACGTATACGGAGTCTGTGCTTCCGCCAGCACATACACACAGTCTTTAGAGCAGCTGCTT  
AACTCTCCGAAACTAACTTGAGCCTCCATTATGGCATGCTGAATTTACCAAGAAGAATTGGTTCAGA  
AGCTCAGTTCACCACAAAAAGTGCAGATCACTTAAACGGCTGCTTCGGGAAACAGAAGCAACCAATGC  
AATTCCTATGGAGCAAAATTAAGCTTCTCAAAAGTGAATTAAGAAGATTGGAAGGAATCAAGAGCGAGAG  
AAGTCTGCAGCTAACCTGGAATACTTGAAGAAGCTCTTGCTGCAGTTCATTTTCTTGAACCAGGTAGTG  
AAAGAGAGAGACTTCTTCTGTTATAAATACGATGTTGCAGCTCAGCCCTGAAGAAAAGGAAAACTTGC  
TGCGGTTGCTCAAGGTGAGGAAGAAAAATGCTTCCCGTTCTTGGATGGGCATCCTATCTTCATAGTTGG  
TCTGGACTTCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG219795 representing NM\_181453  
 Red=Cloning site Green=Tags(s)

MEDLVQDGVASPATPGTGKSKLETLPKEDLIKFAKKQMMLIQKAKSRCTELEKEIEELRSKPVTEGTGDI  
 IKALTERLDALLEKAETEQQCLSLKKENIKMKQEVEDSVTKMGDAHKELEQSHINYVKEIENLKNELMA  
 VRSKYSEDKANLQKQLEEAMNTQLELSEQLKFQNNSEDNVKKLQEEIEKIRPGFEEQILYLQKQLDATT  
 EKKETVTQLQNIIEANSQHYQKNINSLQEELLQLKAIHQEEVKELMCQIEASAKEHEAEINKLNELKENL  
 VKQCEASEKNIQKQYECLEENLRKATSNANQDNQICSIILLQENTFVEQVVNEKVKHLEDTLKELESQHSI  
 LKDEVTYMNNLKLKLEMDAQHIKDEFFHEREDLEFKINELLAKEEQGCVIEKLSLAGLNKQFCYTV  
 QHNREVQSLKEQHKEISELNETFLSDSEKEKLTLMFEIQGLKEQCENLQQEKQEAILNYESLREIMEIL  
 QTELGESAGKISQEFESMKQQQASDVHELQKLRRTAFTEKDALLETVNRLQGENEKLLSQELVPELENT  
 IKNLQEKNGVYLLSLSRDMLKELEGKINSLTEEKDDFINKLNKSHEEMDNFHKKCEREERLILELGKK  
 VEQTIQYNSELEQKVNELTGGLEETLKEKDQNDQKLEKLMVQMKVLSKDKEVLSAEVKSLEYENNKLSSE  
 KKQLSRDLEVFLSQKEDVILKEHITQLEKQLQMVVEQDNLNKLLENEQVQKLFVKTLQYGLFKEMGSEV  
 SEDSEEKDVVNVLQAVGESLAKINEEKNLAFQRDEKVLLEKEIKCLQEESSVQCEELKSLLRDYEQEK  
 VLLRKELEEIQSEKEALQSDLLEMKNANEKTRLENQNLQVVEVSQTCSKSEIHNEKEKCFIKEHENLK  
 PLLEQKELRDRRAELILLKDSLAKSPSVKNDPLSSVKELEEKIENLEKECKEKEEKINKIKLVAVKAKKE  
 LDSSRKETQTVKEELESRLSEKQQLSASMRDLIQGAESYKNLLLEYEKQSEQLDVEKERANNFHRIEDL  
 TRQLRNSTLQCETINSDNEDLLARIETLQSNAKLLEVQILEVQRAKAMVDKELEAEKLQEKQIKIHATT  
 VNELEELQVQLQEKKQLQKTMQELELVKKAQQTTLMMNEIADYERLMKELNQLTNNKNIEDLEQEI  
 KIQQKQKQETLQEEITSLQSSVQYEEKNTKIKQLLVKTKKELADSKQAETDHLILQASLKGLEASQQV  
 EYKIQLAEITSEKHKIHEHLKTSAEQHQRSL SAYQQRV TALQEECRAAKAEQATVTSEFESYKVRVHNV  
 LKQQKNKSMSQAETEGAKQEREHLEMLIDQLKIKLQDSQNNLQINVELQTLQSEHDTLLERHNKMLQET  
 VSKEAELREKLCISQSENNMMKSEHTQTVSQTLSQNEVLRNSFRDQVRHLQEEHRKTVETLQQQLSKMEA  
 QLFQLKNEPTTRSPVSSQSLKNLRERRNTDPLLDMHTVTREEGEGMETTDTESVSSASTYTSLEQLL  
 NSPETKLEPPLWHAFTKEELVQKLSSTTKSADHLNGLLRETEATNAILMEQIKLLKSEIRRLERNQERE  
 KSAANLEYLKNVLLQFIFLKPGRSERERLLPVINTMLQLSPEEKGLAAVAQGEENASRSSGWASYLHWS  
 SGLR

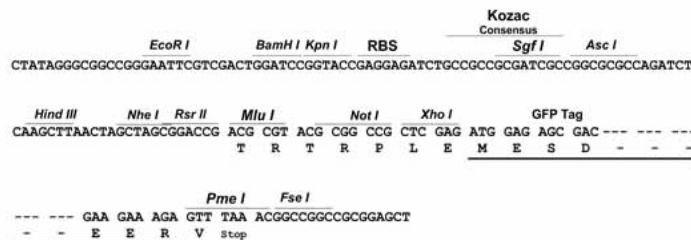
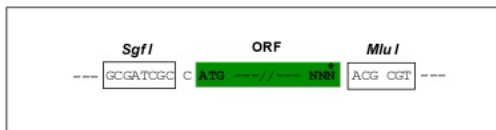
TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:

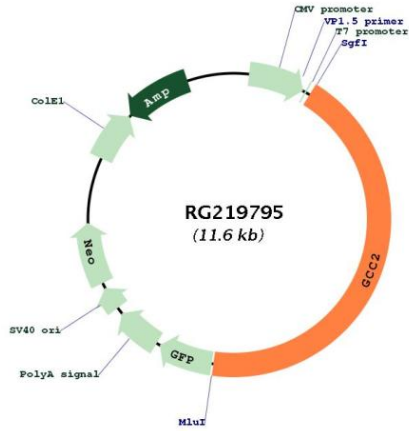


<b>ACCN:</b>	NM_181453
<b>ORF Size:</b>	5052 bp
<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), 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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_181453.3</a>
<b>RefSeq Size:</b>	6918 bp
<b>RefSeq ORF:</b>	5055 bp
<b>Locus ID:</b>	9648
<b>UniProt ID:</b>	<a href="#">Q8IWI2</a>
<b>Cytogenetics:</b>	2q12.3

**Gene Summary:**

The protein encoded by this gene is a peripheral membrane protein localized to the trans-Golgi network. It is sensitive to brefeldin A. This encoded protein contains a GRIP domain which is thought to be used in targeting. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2009]

**Product images:**



Circular map for RG219795