

## Product datasheet for **RG230284**

### **GGA1 (NM\_001172688) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GGA1 (NM_001172688) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GGA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG230284 representing NM\_001172688  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAAGAGCTGCGCAAGCGGTTCCACGACGAAGTGGCAAGTTCGCTTCTCAACGAGCTCATCAAGG  
 TCGTGTCTCCCAAGTATCTGGGCTCTCGGACATCGGAGAAGGTGAAGAACAAGATCTGGAGCTCCTCTA  
 CAGCTGGACAGTGGCCCTGCCGAGGAGGTGAAAATCGCAGAGGCCTACCAGATGCTAAAGAAGCAGGGG  
 ATTGTAAGTCCGACCCAAGCTTCCAGATGACACTACCTTTCCCTTCTCCTCCACGCGCCAAGAATG  
 TGATCTTTGAAGATGAGGAGAAATCCAAGATGCTGGCCGCTGCTGAAGAGCTCCCATCCCGAAGACCT  
 CCGCGCAGCCAATAAGCTCATCAAAGAGATGGTGCAGGAGGACCAGAAGCGGATGGAGAAGATCTCGAAG  
 AGGGTGAATGCCATCGAGGAGGTGAACAACAATGTGAACTGCTCACGGAGATGGTATGAGCCACAGCC  
 AGGGCGGCGCAGCAGCTGGCAGCAGCGAGGACCTCATGAAGGAACTGTACCAGCGCTGTGAGCGGATGCC  
 GCCACGCTCTCCGACTGGCGAGTGACACAGAGGACAATGATGAGGCCTTAGCGGAGATCCTGCAGGCC  
 AATGACAACCTCACCCAGGTGATCAACCTGTATAAGCAGCTGGTGCGGGGTGAGGAGGTCAACGGTGATG  
 CCACAGCCGGCTCCATCCCTGGGAGCACCTCGGCCCTGCTGGATCTCTCAGGCCTGGATCTCCCGCTGC  
 GGGCACCACCTACCCAGCTATGCCACCCGCCCTGGCGAGCAGGCCAGCCCTGAGCAGCCAGTGCCCTCA  
 GTTTCCCTGCTTGACGACGAGCTCATGTCTCTGGGCTCAGTGACCCACACCCCTTACGGCCCAAGCC  
 TGGATGGTACCGGATGGAACAGCTTCCAGTCGTGCGGATGCCACTGAGCCCCAGCCCTGCTCTGGCCCA  
 GGCCCCAGTATGGAAAGCCGACCCACAGCGCAGACATCCCTGCCAGCAAGCAGCGGTCTGGACGACCTA  
 GACCTCCTGGGAAGACCCTCTGCAGCAGTCGCTGCCCCGGAATCCCAGCAAGTCCGGTGGGAGAAGC  
 AGCAGCAACCCCCGGCTCACACTCCGGGACCTGCAGAATAAGAGCAGCAGCTGCAGCTCCCCAGCTC  
 CAGCGCCACAGCCTTCTCCACACCGTGTCCCCAGAGCCCCCAGGCCTCCGCAGCAGCCCGTACCAACC  
 GAGCTCTCACTGGCCAGCATCACTGTGCCCTGGAGTCCATCAAACCCAGCAACATCCTGCCGTGACTG  
 TGTATGACCAGCAGGCTTCCGCATCCTTCCATTTTGGCCGGGACCCACTGCCAGGGCGCTCCGACGT  
 GCTGGTGGTGGTGGTTCCATGCTGAGCACCGCCCCAGCCATCCGCAACATCGTGTTCAGTCAGCT  
 GTCCCCAAGTTATGAAGGTGAAGCTGCAGCCACCCTCGGGCAGGAGCTGCCAGCTTTTAAACCCATCG  
 TCCACCCCTCAGCAATCACCCAGGTCTGCTGCTTCCAACCCCAAGGAGAAGTTCCGCTCCGCTA  
 CAAGCTCACCTTACCATGGGTGACCAGACCTACAACGAGATGGGGATGTGGACCAGTTCACCCACCT  
 GAAACCTGGGGTAGCCTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG230284 representing NM\_001172688  
 Red=Cloning site Green=Tags(s)

MKSCGKRFHDEVGKFRFLNELIKVVSPKYLGSRTSEKVKNKILELLYSWTVGLPEEVKIAEAYQMLKKQG  
 IVKSDPKLPDDTTFPLPPRPKNVIFEDEKSKMLARLLKSSHPEDLRAANKLIKEMVQEDQKRMEKISK  
 RVNAIEEVNANNVLLTEMVMSHQGAAAGSSEDLMKELYQRCERMRPTLFRLASDTEDEALAEILQA  
 NDNLTQVINLYKQLVRGEEVNGDATAGSIPGSTSALLDL SGLDLPPAGTTYPAMPTRPGEQASPEQPSAS  
 VSLLDDELM SGLSDPTPPSGPSLDGTGWNSFQSSDATEPPAPALAQAPSMESRPPAQTSLPASSGLDDL  
 DLLGKTLQQLPPESSQQRWEKQPTPRLTLRDLQNKSSSCSSPSSSATSLHTVSPPEPRPPQPVPT  
 ELSLASITVPLESIKPSNILPVTVYDQHGFRILFHFARDPLPGRSDVLVVVVSM LSTAPQPIRNI VFQSA  
 VPKVMKVLQPPSGTELP AFNPIVHPSAITQVLLLLANPQKEKVRRLRYKLTFTMGDQTYNEMGDVDQFPPP  
 ETWGS L

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001172688

**ORF Size:** 1698 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\\_001172688.2](#)

**RefSeq Size:** 3231 bp

**RefSeq ORF:** 1701 bp

**Locus ID:** 26088

**UniProt ID:** [Q9UJY5](#)

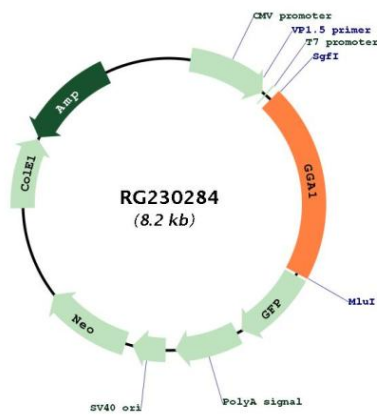
**Cytogenetics:** 22q13.1

**Protein Families:** Druggable Genome

**Protein Pathways:** Lysosome

**Gene Summary:** This gene encodes a member of the Golgi-localized, gamma adaptin ear-containing, ARF-binding (GGA) protein family. Members of this family are ubiquitous coat proteins that regulate the trafficking of proteins between the trans-Golgi network and the lysosome. These proteins share an amino-terminal VHS domain which mediates sorting of the mannose 6-phosphate receptors at the trans-Golgi network. They also contain a carboxy-terminal region with homology to the ear domain of gamma-adaptins. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG230284