

## Product datasheet for **RC230376**

### **GGA1 (NM\_001172687) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GGA1 (NM_001172687) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GGA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC230376 representing NM\_001172687  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGAGCCCGCATGGAGCCGAGACTCTGGAGCGCGAATCAATAGAGCCACGAACCCCTGAACAAGG  
AGCTCGACTGGGCCAGCATCAACGGCTTCTGCGAGCAGCTCAACGAGGACTTTGAGGGGCTCCACTCGC  
CACCCGGCTGCTGGCCACAAGATCCAGTCCCCACAGGAGTGGGAGGCGATCCAGGCCTTGACGGTGCTG  
GAAACATGCATGAAGAGCTGCGGCAAGCGTTCCACGACGAAGTGGGCAAGTTCCGCTTTCTCAACGAGC  
TCATCAAGGTCGTGTCTCCCAAGTATCTGGGCTCTCGGACATCGGAGAAGGTGAAGAACAAGATCTTGA  
GCTCCTTACAGCTGGACAGTGGGCTGCCGAGGAGGTGAAAATCGCAGAGGCCACCAGATGCTAAAG  
AAGCAGGGGATTGTAAGTCCGACCCCAAGCTTCCAGATGACACTACCTTCCCCTTCTCCTCCACGGC  
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CGAAGACCTCCGCGCAGCCAATAAGCTCATCAAAGAGATGGTGCAGGAGGACCAGAAGCGGATGGAGAAG  
ATCTCGAAGAGGGTGAATGCCATCGAGGAGGTGAACAACAATGTGAAACTGCTCAGGAGATGGTATGA  
GCCACAGCCAGGGCGGCCGAGCAGCTGGCAGCAGCGAGGACCTCATGAAGGAACTGTACCAGCGCTGTGA  
GCGGATGCGGCCACGCTCTTCCGACTGGCGAGTGACACAGAGGACAATGATGAGGCCTTAGCGGAGATC  
CTGCAGGCCAATGACAACCTCACCCAGGTGATCAACCTGTATAAGCAGCTGGTGCGGGGTGGAGGAGTCA  
ACGGTGTGCCACAGCCGGCTCCATCCCTGGGAGCACCTCGGCCCTGCTGGATCTCTCAGGCCTGGATCT  
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GACGACCTAGACCTCCTGGGGAAGACCCTCCTGCAGCAGTCGCTGCCCCCGGAATCCCAGGAGAAGCAGC  
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CGCCACCAGCCTTCTCCACACCGTGTCCCAGAGCCCCCAGGCCTCCGACGAGCCCGTACCAACCGAG  
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ATGACCAGCACGGCTTCCGATCCTCTTCCATTTGCCCGGACCCTGCCAGGGCGCTCCGACGTGCT  
GGTGGTGGTGGTTCCATGCTGAGCACCGCCCCAGCCATCCGCAACATCGTGTCCAGTCAGCTGTC  
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ACCCCTCAGCAATCACCCAGTCTGCTGCTTGCCAACCCCGAAGGAGAAGGTTGCGCTCCGCTACAA  
GCTCACCTTACCATGGGTGACCAGACCTACAACGAGATGGGGATGTGGACCAGTTCACCCACCTGAA  
ACCTGGGGTAGCCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA

**Protein Sequence:** >RC230376 representing NM\_001172687  
Red=Cloning site Green=Tags(s)

```
MEPAMEPETLEARINRATNPLNKELDWASINGFCEQLNEDFEGPPLATRLLAHKIQSPQEWAIQALTVL
ETCMKSCGKRFHDEVGKFRFLNELIKVVSPKYLGSRTSEKVKNKILELLYSWTVGLPEEVKIAEAYQMLK
KQGIIVKSDPKLPDDTTFFLPPRPKNVIFEDEEKSKMLARLLKSSHPEDLRAANKLIKEMVQEDQKRMEK
ISKRVNAIEEVNNVKKLLTEMVMSHSQGGAAAGSSEDLMKELYQRCERMRTLFRLASDTEDEALAEI
LQANDNLQVINLYKQLVRGEEVNGDATAGSIPGSTSALLDLSGLDLPPAGTTYPAMPTRPGEQASPEQP
SASVSLLDDELMSLGLSDPTPPSGPSLDGTGWNFSQSSDATEPPAPALAQAPSMESRPPAQTSLPASSGL
DDL DLLGKTL LQQSLPPESQEKQPTPRLTLRDLQNKSSSCSSPSSSATSL LHTVSPEPPRPQQPVPT E
LSLASITVPLESIKPSNILPVTYDQHGFRILFHFARDPLPGRSDVLVVVSM LSTAPQPIRNIVFQSAV
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TWGSL
```

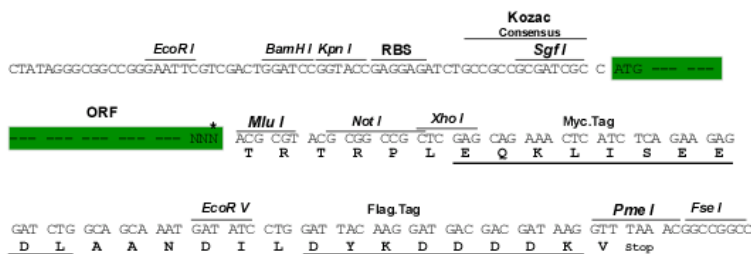
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8070\\_g04.zip](https://cdn.origene.com/chromatograms/mk8070_g04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001172687

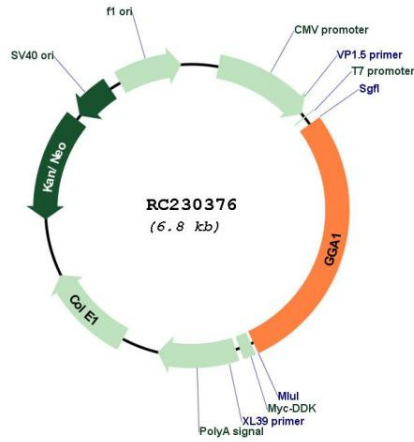
**ORF Size:** 1905 bp

**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](#)

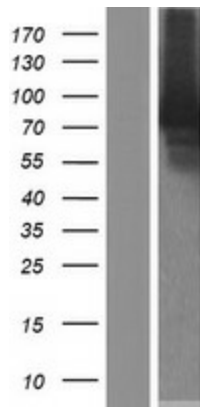
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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>	<u>NM_001172687.1, NP_001166158.1</u>
<b>RefSeq ORF:</b>	1908 bp
<b>Locus ID:</b>	26088
<b>UniProt ID:</b>	<u>Q9UJY5</u>
<b>Cytogenetics:</b>	22q13.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Lysosome
<b>MW:</b>	70.3 kDa
<b>Gene Summary:</b>	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 RC230376



Western blot validation of overexpression lysate (Cat# [LY433376]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230376 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).