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Product datasheet for RC208305

GGA1 (NM_001001560) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GGA1 (NM_001001560) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GGA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC208305 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCCGCGATGGAGCCGGAGACTCTGGAGGCGCGAATCAATAGAGCCACGAACCCCCTGAACAAGG
AGCTCGACTGGGCCAGCATCAACGGCTTCTGCGAGCAGCTCAACGAGGACTTTGAGGGGCCTCCACTCGC
CACCCGGCTGCTGGCCCACAAGATCCAGTCCCCACAGGAGTGGGAGGCGATCCAGGCCTTGACGGTGCTG
GAAACATGCATGAAGAGCTGCGGCAAGCGGTTCCACGACGAAGTGGGCAAGTTCCGCTTTCTCAACGAGC
TCATCAAGGTCGTGTCTCCCAAGTATCTGGGCTCTCGGACATCGGAGAAGGTGAAGAACAAGATCTTGGA
GCTCCTCTACAGCTGGACAGTGGGCCTGCCCGAGGAGGTGAAAATCGCAGAGGCCTACCAGATGCTAAAG
AAGCAGGGGATTGTAAAGTCCGACCCCAAGCTTCCAGATGACACTACCTTTCCCCTTCCTCCTCCACGGC
CGAAGAATGTGATCTTTGAAGATGAGGAGAAATCCAAGATGCTGGCCCGCCTGCTGAAGAGCTCCCATCC
CGAAGACCTCCGCGCAGCCAATAAGCTCATCAAAGAGATGGTGCAGGAGGACCAGAAGCGGATGGAGAAG
ATCTCGAAGAGGGTGAATGCCATCGAGGAGGTGAACAACAATGTGAAACTGCTCACGGAGATGGTGATGA
GCCACAGCCAGGGCGGCGCAGCAGCTGGCAGCAGCGAGGACCTCATGAAGGAACTGTACCAGCGCTGTGA
GCGGATGCGGCCCACGCTCTTCCGACTGGCGAGTGACACAGAGGACAATGATGAGGCCTTAGGCCTCAGT
GACCCCACACCCCCTTCAGGCCCAAGCCTGGATGGTACCGGATGGAACAGCTTCCAGTCGTCGGATGCCA
CTGAGCCCCCAGCCCCTGCTCTGGCCCAGGCCCCCAGTATGGAAAGCCGACCCCCAGCGCAGACATCCCT
GCCAGCAAGCAGCGGTCTGGACGACCTAGACCTCCTGGGGAAGACCCTCCTGCAGCAGTCGCTGCCCCCG
GAATCCCAGCAAGTGCGGTGGGAGAAGCAGCAGCCAACCCCCCGGCTCACACTCCGGGACCTGCAGAATA
AGAGCAGCAGCTGCAGCTCCCCCAGCTCCAGCGCCACCAGCCTTCTCCACACCGTGTCCCCAGAGCCCCC
CAGGCCTCCGCAGCAGCCCGTACCAACCGAGCTCTCACTGGCCAGCATCACTGTGCCCCTGGAGTCCATC
AAACCCAGCAACATCCTGCCCGTGACTGTGTATGACCAGCACGGCTTCCGCATCCTCTTCCATTTTGCCC
GGGACCCACTGCCAGGGCGCTCCGACGTGCTGGTGGTGGTGGTTTCCATGCTGAGCACCGCCCCCCAGCC
CATCCGCAACATCGTGTTCCAGTCAGCTGTCCCCAAGGTTATGAAGGTGAAGCTGCAGCCACCCTCGGGC
ACGGAGCTGCCAGCTTTTAACCCCATCGTCCACCCCTCAGCAATCACCCAGGTCCTGCTGCTTGCCAACC
CCCAGAAGGAGAAGGTTCGCCTCCGCTACAAGCTCACCTTCACCATGGGTGACCAGACCTACAACGAGAT
GGGGGATGTGGACCAGTTCCCCCCACCTGAAACCTGGGGTAGCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208305 protein sequence
Red=Cloning site Green=Tags(s)

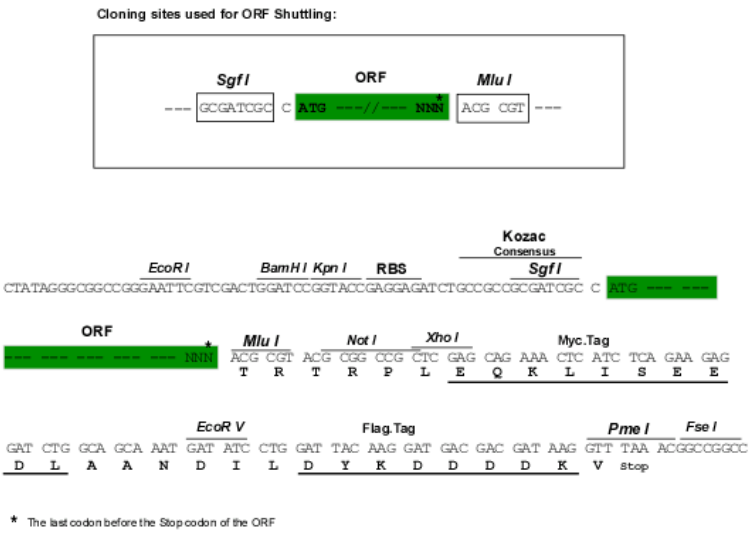
MEPAMEPETLEARINRATNPLNKELDWASINGFCEQLNEDFEGPPLATRLLAHKIQSPQEWEAIQALTVL
ETCMKSCGKRFHDEVGKFRFLNELIKVVSPKYLGSRTSEKVKNKILELLYSWTVGLPEEVKIAEAYQMLK
KQGIVKSDPKLPDDTTFPLPPPRPKNVIFEDEEKSKMLARLLKSSHPEDLRAANKLIKEMVQEDQKRMEK
ISKRVNAIEEVNNNVKLLTEMVMSHSQGGAAAGSSEDLMKELYQRCERMRPTLFRLASDTEDNDEALGLS
DPTPPSGPSLDGTGWNSFQSSDATEPPAPALAQAPSMESRPPAQTSLPASSGLDDLDLLGKTLLQQSLPP
ESQQVRWEKQQPTPRLTLRDLQNKSSSCSSPSSSATSLLHTVSPEPPRPPQQPVPTELSLASITVPLESI
KPSNILPVTVYDQHGFRILFHFARDPLPGRSDVLVVVVSMLSTAPQPIRNIVFQSAVPKVMKVKLQPPSG
TELPAFNPIVHPSAITQVLLLANPQKEKVRLRYKLTFTMGDQTYNEMGDVDQFPPPETWGSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6552_c05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001001560

ORF Size: 1656 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_001001560.2, NP_001001560.1

RefSeq Size: 2924 bp

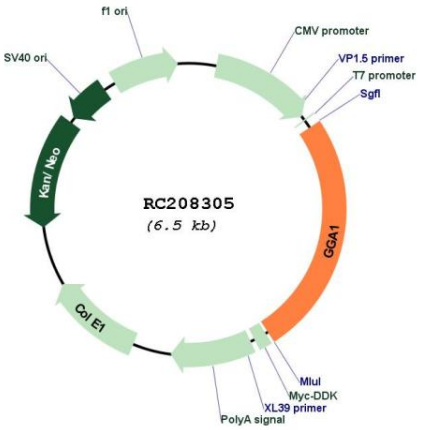
RefSeq ORF: 1659 bp

Locus ID: 26088

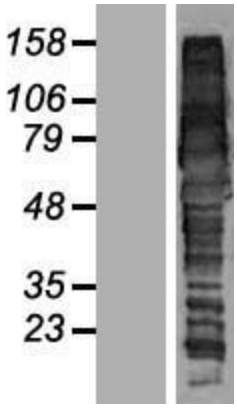
UniProt ID: Q9UJY5

Cytogenetics:	22q13.1
Protein Families:	Druggable Genome
Protein Pathways:	Lysosome
MW:	61.4 kDa
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]

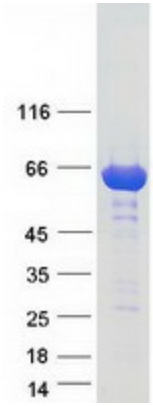
Product images:



Circular map for RC208305



Western blot validation of overexpression lysate (Cat# [LY424381]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208305 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GGA1 protein (Cat# [TP308305]). The protein was produced from HEK293T cells transfected with GGA1 cDNA clone (Cat# RC208305) using MegaTran 2.0 (Cat# [TT210002]).