

Product datasheet for **MG209645**

Gga1 (NM_145929) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gga1 (NM_145929) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gga1
Synonyms:	4930406E12Rik; AU016030; AW209092
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG209645 representing NM_145929
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCCCGCATGGAGCCGAGACTCTGGAGGCACGAATCAACAGAGCCACAAATCCCCTGAACAAGG
 AGCTGAACTGGGCCAGCATCAACAGTTTCTGCGAGCAGCTCAACGAAGACTTTGAGGGGCCCTCCACTTGC
 CACTCGCTTGTGGCCACAAGATCCAGTCCCCACAGGAATGGGAAGCCATCCAGGCCTTACGTTCTG
 GAGACGTGCATGAAGAGCTGCGCAAGAGGTTCCATGATGAGGTGGGCAAGTTCCGCTTCTCAACGAGC
 TCATCAAGGTTGTCTCCCAAGTACTTGGGCTCCCGGACATCTGAGAAGGTGAAGAGTAAGATCTTGA
 GCTGCTGTACAGCTGGACGTTTGCCTGCCTGAGGAGGTGAAGATTGCAGAAGCCTACCAGATGCTGAAG
 AAGCAGGGGATTGTGAAGTCGGACCCCAAGCTTCCAGAGGATGCCATCTTCCCCTCCCCCTCCCCGGC
 CCAAGAATGTGATCTTTGAAGATGAGGAGAAGTCCAAGATGCTGGCCCGCTGCTGAAGAGCTCACACCC
 TGAGGACCTCCGGGCTGCCAATAAGCTCATCAAGAGATGGTGCAGGAGGACCAGAAGCGGATGGAAAAG
 ATCTCCAAGCGGGTGAATGCCATCGAGGAGGTCAACAACAATGTGAAGTTGCTGACAGAGATGGTATGA
 GCCACAGCCAGGGTGTGCATCCAGCAGCAGTGGACCTCATGAAGAACTGTACCAGCGCTGTGAGCG
 CATGCGACCCACACTCTCCGACTGGCCAGTGACACGGAAGACAATGATGAGGCCTTAGCTGAGATCCTG
 CAGGCTAATGACAATCTCACCCAGGTGATCAACCTGTACAAGCAGCTGGTCCGGGGCAGGAGGTCAACG
 GTGATGCCACAGCCAGCTCCATTCTGGAAGCAGCTCAGCCCTGCTGGACCTCTCAGGCCTGGACCTCCC
 TCCCCGGGCACCCAGCCAGCCAGCCACCCCGCCCTGGCAACCAGAGCAGTCTGAGCAGCTCAGT
 GCCTCGGTGTCCTGCTGATGACGAGCTCATGTCTCTGGGCCTAAGTGACCCGACACCACCTTCAGGCA
 CCAGCTCAGATAGTGTGGGTGGGACAACCTCCAGTCATCAGATGGCACTGAATCCCTCAGTCCCTCTCC
 AGCCAGGCCCCAGCATGGACTGCCGACCCCCAGCCAGGCCCTCCACCAACGAGCAGCGGCCTGGAC
 GACCTGGACCTCTTGGGAAAACCTTATGCAGCAGGCTCTGCCTCCGGAAGCCAGCAAGTGCGGTGGG
 AGAAGCAGCAGCCAGCCCCCGGCTCACCTCCGTGACCTGCAGAGTAAGAGCAGCTCGCCAGCCAGG
 AGCCGCCAGCCTCCTCCACACCAGTCCCAGAGCCCTGGGCCTCCACCTCAGGCCACACCCACTGAG
 TTCTCCCTAACCCAGCATCACTGTCCCTGGAGTCTATCAAACCCAGCAGCATCTTGCCAGTGACCGTTT
 ATGACCAGCATGGCTTCCGTGTCCTCTTCCATTTGCTCGGGACCCACTGCCAGGGCGCTCCGATGTGCT
 GGTGGTGGTCTCTATGCTGAGCAGCGGCCCCAGCCATCCGGAACATCGTTTTCCAGTCAGCCGTC
 CCCAAGGTCATGAAGGTGAGGCTGCAGCCACCTCCGGCACAGAGCTGCCAGCGTTCAACCCCATCGTCC
 ACCCCTCAGCCATCACCCAGTCTGCTCCTTGCTAACCCCCAGAAGGAGAAGGTTGCGCTCCGCTACAA
 GCTCATCTTCACTATGGGCGACCAGACCTACAATGAGATGGGAGATGTGGATCAGTTCACCCACAGAG
 ACCTGGGGGAGCCTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG209645 representing NM_145929
 Red=Cloning site Green=Tags(s)

MEPAMEPETLEARINRATNPLNKELNWSINSFCEQLNEDFEGPPLATRLLAHKIQSPQEWAIQALTVL
 ETCMKSCGKRFHDEVGKFRFLNELIKVSPKYLGSRTSEKVKSKILELLYSWTVCLPEEVKIAEAYQMLK
 KQGIKSDPKLPEDAIIFLPPRPKNVIFEDEEKSKMLARLLKSSHPEDLRAANKLIKEMVQEDQKRMEK
 ISKRVNAIEEVNNVKKLLTEMVMSHSQGAASSSEDLMKELYQRCERMRPTLFRLASDTEDEALAEIL
 QANDNLTVQVINLYKQLVRGEEVNGDATASSIPGSTSALLDLGLDLPPPQTTPATPTRPQNQSSPEQLS
 ASVSLLDDELMSLGLSDPTPPSGTSSDSVGVWDFQSSDGTSSVPPPAQAPSMDCRPPAQAPPPTSSGLD
 DLDLLGKTLMQQALPPEAQVVRWEKQPPAPRLTLRDLQSKSSSPGAAALLHTTSPEPPGPPQATPTE
 FSLTSITVPLESIKPSILPVTYVDQHGFRVLFHFARDPLPGRSDVLVVVVSMSTAPQPIRNVIFQSAV
 PKVMKVRQLQPPSGTELPANPIVHPSAITQVLLLANPQKEKVRRLRYKLIFTMGDQTYNEMGDVDQFPPE
 TWGSL

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_145929

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.

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_145929.2](#), [NP_666041.1](#)

RefSeq Size: 3034 bp

RefSeq ORF: 1908 bp

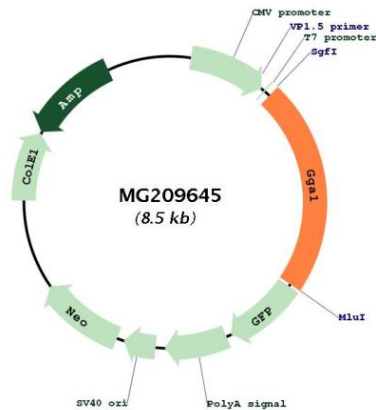
Locus ID: 106039

UniProt ID: [Q8R0H9](#)

Cytogenetics: 15 E1

Gene Summary: Plays a role in protein sorting and trafficking between the trans-Golgi network (TGN) and endosomes (PubMed:25405894). Mediates the ARF-dependent recruitment of clathrin to the TGN and binds ubiquitinated proteins and membrane cargo molecules with a cytosolic acidic cluster-dileucine (DXLL) motif. Mediates export of the GPCR receptor ADRA2B to the cell surface (By similarity). Required for targeting PKD1:PKD2 complex from the trans-Golgi network to the cilium membrane (PubMed:25405894). Regulates retrograde transport of proteins such as phosphorylated form of BACE1 from endosomes to the trans-Golgi network (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG209645