

## Product datasheet for **MG201038**

### Ggact (NM\_145466) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Tag:** TurboGFP  
**Symbol:** Ggact  
**Synonyms:** A2Id1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**ORF Nucleotide Sequence:** >MG201038 representing NM\_145466  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCCCACATCTTCGTGTATGGCACCCCTGAAGCGCGCCAACCCAACCACAAAGTCATGCTGGACCATT  
CACATGGCTTAGCAGCCTTCCGAGGCCGAGGCTGCACAGTTGAGTCCTTCCCACTGGTGATTGCAGGCCGA  
GCACAACATACCTTGGCTGTGTACCTACCAGGCAAGGGCCACTGTGTGACAGGTGAGATCTACGAGGTG  
GACGAGCAGATGTTGCGTTTCCTGGATGACTTTGAAGACTGCCCCAGCATGTACCAGCGCACAGCCCTGC  
AGGTGCAGGTGCTAGAGTGGGAGGGTGACGGTGACCCCTGGGGACAGTGTGCAAGTCTTTGTGTACTACTAC  
AGCCACCTATGCACCCGAGTGGCTGTTTCTCCCTACCATGAAAGCTATGATTCTGAGGGTCCACATGGG  
CTACGCTACAACCCCGGAAACAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG201038 representing NM\_145466  
Red=Cloning site Green=Tags(s)

MAHIFVYGTALKRGQPNHKVMLDHSGLAAFRGRGCTVESFPLVIAGEHNIPWLLYLPKGHCVTGEIYEV  
DEQMLRFLDDFDPCSMYQRTALQVQVLEWEGDGPDSVQCFVYTTATYAPEWLFLPYHESYDSEPHG  
LRYNPRENR

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_145466

**ORF Size:** 447 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_145466.2](#)

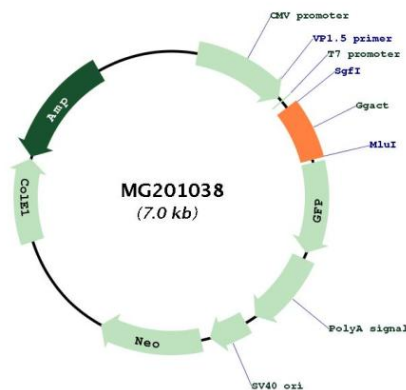
RefSeq Size: 1045 bp  
RefSeq ORF: 450 bp  
Locus ID: 223267

UniProt ID: [Q923B0](#)

Cytogenetics: 14 E5

**Gene Summary:** Contributes to degradation of proteins cross-linked by transglutaminases by degrading the cross-link between a lysine and a glutamic acid residue. Catalyzes the formation of 5-oxo-L-proline from L-gamma-glutamyl-L-epsilon-lysine. Inactive with L-gamma-glutamyl-alpha-amino acid substrates such as L-gamma-glutamyl-L-alpha-cysteine and L-gamma-glutamyl-L-alpha-alanine.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG201038