

## Product datasheet for **RG206950**

### **GABARAPL2 (NM\_007285) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** GABARAPL2 (NM\_007285) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** GABARAPL2  
**Synonyms:** ATG8; ATG8C; GATE-16; GATE16; GEF-2; GEF2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG206950 representing NM\_007285  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGTGGATGTTCAAGGAGGACCACTCGCTGGAACACAGATGCGTGGAGTCCGCGAAGATTCGAGCGA  
AATATCCCGACAGGGTCCGGTGATTGTGGAAAAGGTCTCAGGCTCTCAGATTGTTGACATTGACAAACG  
GAAGTACTTGGTCCCATCTGATCACTGTGGCTCAGTTCATGTGGATCATCAGGAAAAGGATCCAGCTT  
CCTTCTGAAAAGGCGATCTTCTGTTTGTGGATAAGACAGTCCCACAGTCCAGCCTAACTATGGGACAGC  
TTTACGAGAAGGAAAAGATGAAGATGGATTCTTATATGTGGCTACAGCGGAGAGAACAACCTTTTGCTT  
C

**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA**

**Protein Sequence:** >RG206950 representing NM\_007285  
**Red=Cloning site Green=Tags(s)**

MKWMFKEDHSLEHRCVESAKIRAKYPDRVPVIVEKVSQIVDIDKRKYLVPDITVAQFMWIIRKRIQL  
PSEKAIIFLVDKTVPQSSLTMGQLYEKEDDGLYVAYSGENTFGF

**TRTRPLE - GFP Tag - V**

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_007285

**ORF Size:** 351 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.

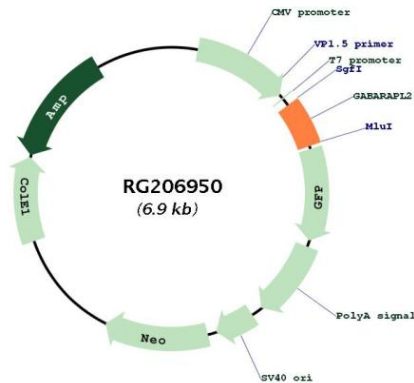
**RefSeq:** [NM\\_007285.5](#), [NP\\_009216.1](#)

**RefSeq Size:** 450 bp

**RefSeq ORF:** 354 bp

**Locus ID:** 11345  
**UniProt ID:** [P60520](#)  
**Cytogenetics:** 16q23.1  
**Domains:** MAP1\_LC3  
**Protein Pathways:** Regulation of autophagy  
**Gene Summary:** Ubiquitin-like modifier involved in intra-Golgi traffic. Modulates intra-Golgi transport through coupling between NSF activity and SNAREs activation. It first stimulates the ATPase activity of NSF which in turn stimulates the association with GOSR1 (By similarity). Involved in autophagy. Plays a role in mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production. Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RG206950