

## Product datasheet for **RG210005**

### AGL (NM\_000642) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AGL (NM_000642) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AGL
Synonyms:	GDE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210005 representing NM_000642 Red=Cloning site Blue=ORF Green=Tags(s)

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**Protein Sequence:** >RG210005 representing NM\_000642  
 Red=Cloning site Green=Tags(s)

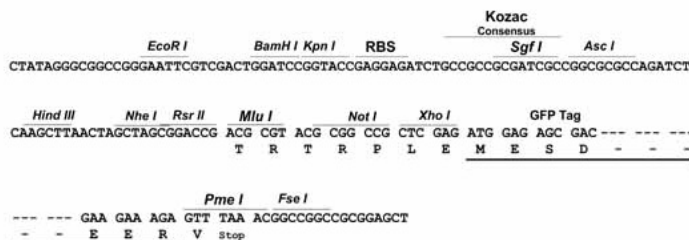
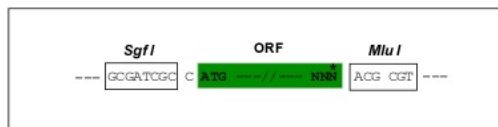
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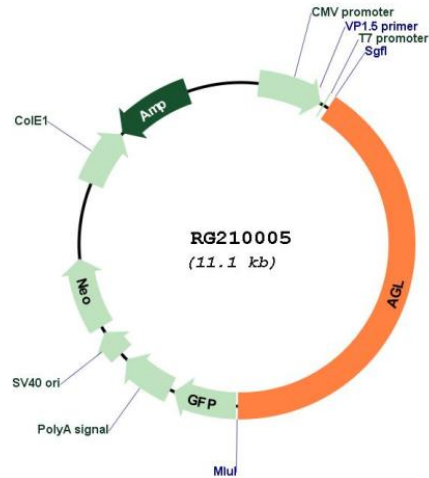
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_000642

**ORF Size:** 4596 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\\_000642.3](#)

**RefSeq Size:** 7371 bp

**RefSeq ORF:** 4599 bp

**Locus ID:** 178

**UniProt ID:** [P35573](#)

**Cytogenetics:** 1p21.2

**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Starch and sucrose metabolism

**Gene Summary:** This gene encodes the glycogen debrancher enzyme which is involved in glycogen degradation. This enzyme has two independent catalytic activities which occur at different sites on the protein: a 4-alpha-glucotransferase activity and a amylo-1,6-glucosidase activity. Mutations in this gene are associated with glycogen storage disease although a wide range of enzymatic and clinical variability occurs which may be due to tissue-specific alternative splicing. Alternatively spliced transcripts encoding different isoforms have been described. [provided by RefSeq, Jul 2008]