

## Product datasheet for **RG213793**

### DLG5 (NM\_004747) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DLG5 (NM_004747) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DLG5
Synonyms:	LP-DLG; P-DLG5; PDLG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213793 representing NM_004747 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

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AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG213793 representing NM\_004747  
 Red=Cloning site Green=Tags(s)

MEPQRRELLAQCCQSLAQAMTEVAVLGLLEAAGALSPGERRQLDEEAGGAKAELLLKLLAKERDHFQD  
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 SAAARRSFFRRKHKHSKSGSKDGKDLLALDAFSSDSIPLFEDSVSLAYQRVQKVDCTALRPVILGPLLD  
 VVKEMLVNEAPGKFCRCPLEVMKASQQA IERGVKDCLFVDYKRRSGHFDVTTVASIKEITEKNRCHLLDI  
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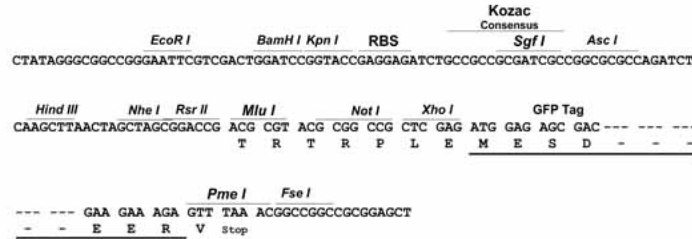
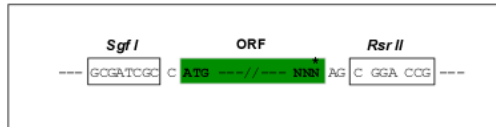
SGPTRRRLE - GFP Tag - V

**Restriction Sites:**

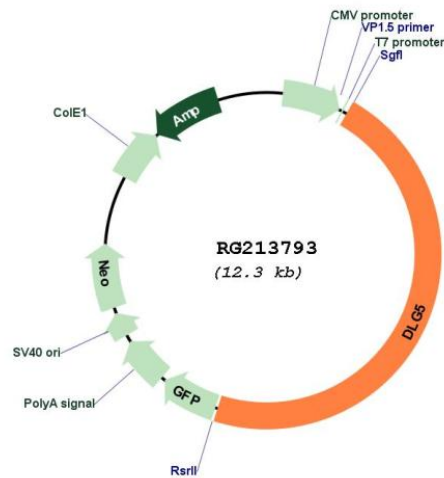
Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM\_004747

ORF Size: 5757 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_004747.3](#), [NP\\_004738.3](#)

**RefSeq Size:** 7493 bp

**RefSeq ORF:** 5760 bp

**Locus ID:** 9231

**UniProt ID:** [Q8TDM6](#)

**Cytogenetics:** 10q22.3

**Domains:** SH3, PDZ, Guanylate\_kin, GuKc

**Protein Families:** Druggable Genome

**Gene Summary:**

This gene encodes a member of the family of discs large (DLG) homologs, a subset of the membrane-associated guanylate kinase (MAGUK) superfamily. The MAGUK proteins are composed of a catalytically inactive guanylate kinase domain, in addition to PDZ and SH3 domains, and are thought to function as scaffolding molecules at sites of cell-cell contact. The protein encoded by this gene localizes to the plasma membrane and cytoplasm, and interacts with components of adherens junctions and the cytoskeleton. It is proposed to function in the transmission of extracellular signals to the cytoskeleton and in the maintenance of epithelial cell structure. Alternative splice variants have been described but their biological nature has not been determined. [provided by RefSeq, Jul 2008]