

# **Product datasheet for RG231524**

#### 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

OriGene Technologies, Inc.

## PLA2G2D (NM\_001271814) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** PLA2G2D (NM\_001271814) Human Tagged ORF Clone

Tag: TurboGFP Symbol: PLA2G2D

Synonyms: PLA2IID; sPLA2-IID; sPLA2S; SPLASH

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG231524 representing NM\_001271814
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGAACTTGCACTGCTGTGGGCTGGTGGTGATGGCTGGTGTGATTCCAATCCAGGGCGGGATCCTGAACCAGACCAAGCTGACCAGCCAACCTGAACAAGATGGCCAACCTGACTGGCAAAAATGCCCATCCTCCTACTGGCCCTACGGCTGTCA

CTGCGGACTAGGTGGCAGAGGCCAACCCAAAGATGCCACGGACTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG231524 representing NM\_001271814

Red=Cloning site Green=Tags(s)

MELALLCGLVVMAGVIPIQGGILNLNKMVKQVTGKMPILSYWPYGCHCGLGGRGQPKDATDC

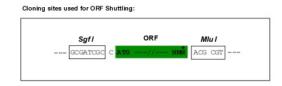
TRTRPLE - GFP Tag - V

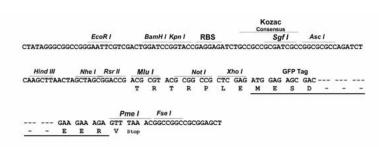
**Restriction Sites:** Sgfl-Mlul



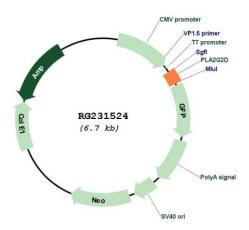


### **Cloning Scheme:**





### Plasmid Map:



**ACCN:** NM\_001271814

ORF Size: 186 bp



#### PLA2G2D (NM\_001271814) Human Tagged ORF Clone - RG231524

**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: <u>NM 001271814.1</u>, <u>NP 001258743.1</u>

1p36.12

 RefSeq Size:
 1878 bp

 RefSeq ORF:
 189 bp

 Locus ID:
 26279

 UniProt ID:
 Q9UNK4

Cytogenetics:

**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

**Protein Pathways:** alpha-Linolenic acid metabolism, Arachidonic acid metabolism, Ether lipid metabolism, Fc

epsilon RI signaling pathway, Glycerophospholipid metabolism, GnRH signaling pathway, Linoleic acid metabolism, Long-term depression, MAPK signaling pathway, Metabolic

pathways, Vascular smooth muscle contraction, VEGF signaling pathway

**Gene Summary:** This gene encodes a secreted member of the phospholipase A2 family, and is found in a

cluster of related family members on chromosome 1. Phospholipase A2 family members

hydrolyze the sn-2 fatty acid ester bond of glycerophospholipids to produce

lysophospholipids and free fatty acid. This gene may be involved in inflammation and

immune response, and in weight loss associated with chronic obstructive pulmonary disease.

Alternative splicing results in multiple transcript variants encoding different isoforms.

[provided by RefSeq, Nov 2012]