

Product datasheet for **RG206872**

PLA2G3 (NM_015715) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLA2G3 (NM_015715) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PLA2G3
Synonyms:	GIII-SPLA2; sPLA2-III; SPLA2III
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG206872 representing NM_015715
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGTTCAGGCAGGGCTGTTTGGGATGCTGGGCTTCTGGGGTGGCCCTGGGGGCTCCCCTGCC
 TCCGCTGTACAGGACCTCTGCCACTTGACCAAGGCCGTCCCTGGCAACCCACTGGGGTACCTGAGCTT
 CCTGGCCAAGGATGCTCAGGGACTGGCCCTGATCCATGCCCGCTGGGATGCGCATAGGAGCTGCAGGCA
 TGTAGCTGGGAGGATGAGCCGGAGCTCACCGCAGCCTACGGTGTCTCTGTGCTCATGAGACTGCCTGGG
 GCTCCTTCATCCACACCCCGGACCCGAGCTGCAGAGAGCACTGGCCACTTTCAGAGTCAGTGGGAGGC
 ATGCCGAGCGCTTGAGGAGAGTCCAGCAGGGGCCAGGAAGAAGCGAGCAGCAGGGCAGAGTGGAGTCCCT
 GGTGGAGGGCACCAGCGAGAGAAGAGAGGATGGACCATGCCTGGCACACTGTGGTGTGGAGTTGGAGATT
 CTGCTGGGAACTCTCGGAGCTGGGGTCTTCCAGGGACCTGATCTCTGTTGCCGGGAACATGACCCTG
 CCCACAGAACATCTACCCTTGCAGTACAATATGGCATCCGAACTACCGATTCCACACCATCTCCCAC
 TGTGACTGTGACACCAGTTTCAGCAATGCCTACAGAATCAGCAGACTCCATCTCGGACATCGTGGGCG
 TGGCCTTCTTCAACGTGCTGGAGATCCCCTGCTTTGTGCTGGAGGAGCAGGAGGCGTGTGTGGCGTGGTA
 CTGGTGGGGCGGGTGTAGGATGTATGGCACAGTGGCCCTCGCTCGCTGCAGCCAGGACCTTCTACAAT
 GCCTCTGGAGCTCCCGGGCCACCTCCCAACTCCCAGCTCCCGGAGCCAGCCCTCCCAAGCCTCGAC
 AGAAGCAGCACCTTCGGAAGGGGCCACCACATCAGAAAGGGTCCAAGCGCCCAAGCAAGCCAACACCAC
 AGCCCTCCAGGACCTATGGTCTCTCCAGGCTTGTGTGGCCCCACAGGCCTCCAGGGCCACAGGGT
 GGCCTAAAACCTCAGGGTGGCCGCTGGGTCTGCCGAGCTTCCGCCGCCACCTGGACCAGTGTGAGCACC
 AGATTGGGCCCCGGAAATCGAGTTCAGCTGCTCAACAGCGCCCAAGAGCCCTTCCACTGCAACTG
 CACGCGCGTCTGGCACGCTTCTGAGGCTCCACAGCCACCCGAGGTTACCAACATGCTTTGGGAGCTG
 CTGGGCACAACCTGCTTCAAGCTGGCCCTCCACTGGACTGTGTGGAAGGCAAAAAGTGTCCAGAGACC
 CTAGGGCCATCAGGGTGTGAGCCCGCCTTGGGAGGCTTCCAGAGGCGACACCAGCTCCAGGATAA
 AGGCACAGATGAGAGGCAGCCATGGCCTTCCAGAGCCCTGAGAGGCCCATGTCATTCTACAACAGTGC
 CTGAGCTAACCCAGGCAGCCAGGAGACCCGACAGGCAGCAGAAGTCTGGAGCCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG206872 representing NM_015715
 Red=Cloning site Green=Tags(s)

MGVQAGLFGMLGFLGVALGGSPALRWYRTSCHLTKAVPGNPLGYLSFLAKDAQGLALIHARWDAHRRLLQA
 CSWEDEPELTAAYGALCAHETAWGSFIHTPGPELQRALATLQSQWEACRALEESPAGARKKRAAGQSGVP
 GGGHQREKRGWMPGLWCGVGDSDAGNSSELGVFQGPDLCCREHRCQPQNI SPLQYNYGIRNYRFHTISH
 CDCDFRFQQLQNHDSISDIVGVAFFNVLEIPCFVLEEAEACVAWYWWGGCRMYGTVPRLARLQPRTFYN
 ASWSSRATSPTPSSRSPAPPKPRQKQHLRKGPPHQKSKRPSKANTTALQDPMVSPRLDVAPTGLQGPQG
 GLKPQGARWVCRSFRRLDQCEHQIGPREIEFQLLNSAQEPLFHCNTRRLARFLRLHSPPEVTNMLWEL
 LGTTFCFLAPPLDCVEGKNCSRDPRAIRVSARHLRRLQQRHQLQDKGTDERQPWPSEPLRGPMSFYNQ
 LQLTQAARRPDRQKQKWSQ

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_015715

ORF Size: 1527 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_015715.2](#), [NP_056530.1](#)

RefSeq Size: 2593 bp

RefSeq ORF: 1530 bp

Locus ID: 50487

UniProt ID: [Q9NZ20](#)

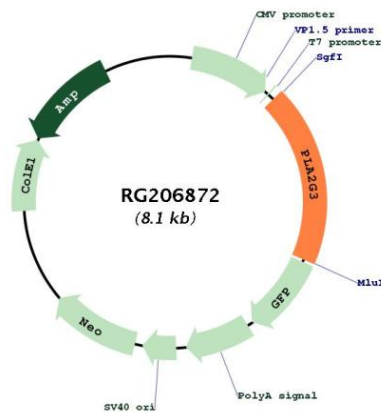
Cytogenetics: 22q12.2

Protein Families: Druggable Genome, Secreted Protein

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 protein that belongs to the secreted phospholipase A2 family, whose members include the bee venom enzyme. The encoded enzyme functions in lipid metabolism and catalyzes the calcium-dependent hydrolysis of the sn-2 acyl bond of phospholipids to release arachidonic acid and lysophospholipids. This enzyme acts as a negative regulator of ciliogenesis, and may play a role in cancer development by stimulating tumor cell growth and angiogenesis. This gene is associated with oxidative stress, and polymorphisms in this gene are linked to risk for Alzheimer's disease. [provided by RefSeq, Apr 2014]

Product images:



Circular map for RG206872