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Product datasheet for MG210449

Pla2g4a (NM_008869) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pla2g4a (NM_008869) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pla2g4a
Synonyms:	cP; cPL; cPLA2; cPLA2-alpha; cPLA2alpha; Pla; Pla2g4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>MG210449 representing NM_008869
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTTTCATAGATCCTTATCAGCACATTATAGTGGAACACCAGTACTCCCATAAGTTTACTGTTGTGG
TTCTACGTGCCACCAAAGTAACCAAGGGGACCTTTGGCGATATGCTGGACACTCCAGATCCTTATGTGGA
ACTTTTCATCTCTACAACCCCTGACAGCAGGAAGCGAACGAGACACTTCAATAATGATATAAACCCCGTG
TGGAATGAGACCTTTGAGTTCATTTTGGATCCTAATCAGGAAAATGTTTTGGAGATCACACTGATGGATG
CCAACTACGTCATGGATGAAACCCTAGGCACAGCTACATTCCCTGTATCTTCAATGAAAGTGGGAGAGAA
GAAAGAAGTCCCTTTTATTTTCAACCAAGTCACTGAAATGATTCTGGAAATGTCTCTGGAAGTTTGTTCA
TGCCCAGACCTACGGTTCAGCATGGCACTGTGTGATCAGGAGAAAACTTTCAGACAGCAGAGGAAAGAGA
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GCCGGTGGTGGCCATTTTGGGTTCAGGTGGGGGTTTCCGGGCCATGGTGGGATTCTCTGGTGTGATGAAG
GCACTGTATGAGTCGGGGATTTTGGACTGTGCTACATACATTGCTGGTCTTTCTGGATCCACATGGTACA
TGTCAACCTTGTACTCTCACCCCGATTTTCCAGAGAAAGGTCCCGAGGAGATTAATGAAGAGCTAATGAA
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TGGGAACAGTTGTAAAAAAATATGAAGAAAACCCCTTGCATTTCTTGATGGGTGTCTGGGGCAGTGCCTT
TTCTATACTGTTCAACAGAGTTTTGGGAGTTTCTGGCTCACAGAATAAAGGCTCTACAATGGAAGAGGAA
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TTCTAAGGGAAACCAAAGAAGAGAAAGAAATCGCTGACTTTGACATTTTTGATGACCCCGAATCGCCATT
TTCAACCTTCAACTTTCAGTATCCCAATCAAGCATTCAAAAGGCTGCATGATCTGATGTACTTCAACACA
CTGAACAACATTGATGTGATAAAGGATGCCATTGTTGAGAGCATTGAATACAGAAGACAGAACCCATCTC
GTTGCTCTGTTTCCCTCAGTAATGTTGAAGCAAGAAAATTCTTCAATAAGGAGTTTCTAAGTAAACCCAC
TGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

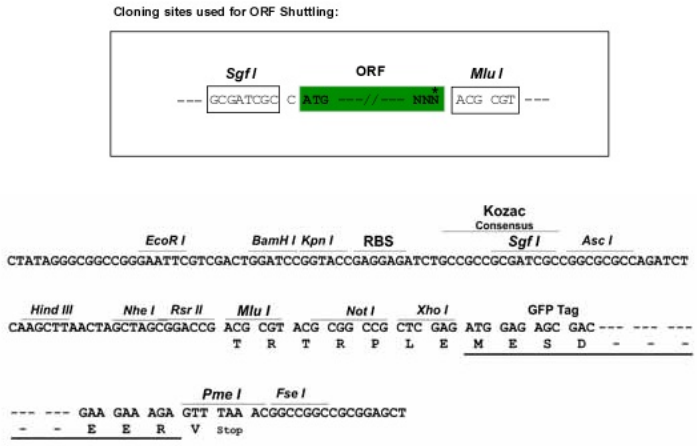
>MG210449 representing NM_008869
Red=Cloning site Green=Tags(s)

MSFIDPYQHIIVEHQYSHKFTVVVLRATKVTKGTFGDMLDTPDPYVELFISTTPDSRKRTRHFNNDINPV
WNETFEFILDPNQENVLEITLMDANYVMDETLGTATFPVSSMKVGEKKEVPFIFNQVTEMILEMSLEVCS
CPDLRFSMALCDQEKTFRQQRKENIKENMKKLLGPKKSEGLYSTRDVPVVAILGSGGGFRAMVGFSGVMK
ALYESGILDCATYIAGLSGSTWYMSTLYSHPDFPEKGPEEINEELMKNVSHNPLLLLTPQKVKRYVESLW
KKKSSGQPVTFTDIFGMLIGETLIQNRMSMTLSSLKEKVNAARCPLPLFTCLHVKPDVSELMFADWVEFS
PYEIGMAKYGTFMAPDLFGSKFFMGTVVKKYEENPLHFLMGVWGSAFSILFNRVLGVSGSQNKGSTMEEE
LENITAKHIVSNDSSDSDDEAQGPKGTENEEAEKEYQSDNQASWVHRMLMALVSDSALFNTREGRAGKVH
NFMLGLNLNTSYPLSPLRDFSSQDSFDDELDAAVADPDEFERIYEPLDVKSKKIHVVDSGLTFNLPYPLI
LRPQRGVDLIISFDFSARPSDTSPPFKELLLAEKWAKMNKLPFPKIDPYVFDREGLKECYVFKPKNPDVE
KDCPTIIHFVLANINFRKYKAPGVLRETKEEKEIADFDIFDDPESPFSTFNFQYPNQAFKRLHDLMYFNT
LNNIDVIKDAIVESIEYRRQNPSRCSVSLSNVEARKFFNKEFLSKPTV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_008869

ORF Size: 2244 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_008869.2

RefSeq Size: 2846 bp

RefSeq ORF: 2247 bp

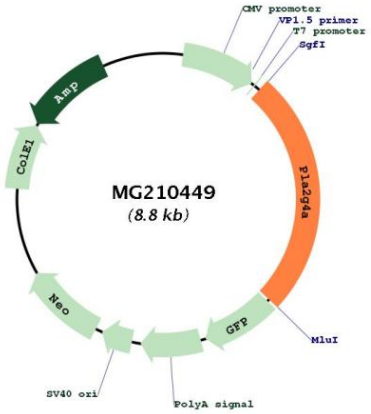
Locus ID: 18783

UniProt ID: P47713

Cytogenetics: 1 63.51 cM

Gene Summary: The protein encoded by this gene is a member of the phospholipase A2 group IV family. This enzyme hydrolyzes membrane phospholipids, thereby releasing the polyunsaturated fatty acid, arachidonic acid. Arachidonic acid is further metabolized into eicosanoids such as leukotrienes, thromboxanes and prostaglandins, that play important roles in regulating diverse biological processes such as inflammatory responses, membrane and actin dynamics, and tumorigenesis. A rise in intracellular calcium levels results in binding of calcium to the C2 domain of this protein, and triggers the translocation from the cytosol to intracellular membranes, including the Golgi apparatus. Disruption of this gene in mice led to decreased levels of eicosonaoids and platelet-activating factor, decreased allergic symptoms, and impaired reproductive ability in females. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2015]

Product images:



Circular map for MG210449