

Product datasheet for PH320972

Phospholipase A2 (PLA2G4A) (NM_024420) Human Mass Spec Standard

Product data:

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| Product Type: | Mass Spec Standards |
| Description: | PLA2G4A MS Standard C13 and N15-labeled recombinant protein (NP_077734) |
| Species: | Human |
| Expression Host: | HEK293 |
| Expression cDNA Clone or AA Sequence: | RC220972 |
| Predicted MW: | 85 kDa |
| Protein Sequence: | >RC220972 representing NM_024420 Red=Cloning site Green=Tags(s) |
| | MSFIDPYQHIIIVEHQYSHKFTVVVLRATKVTKGAFGDMLDTPDPYVELFISTTPDSRKRTRHFNNDINPV WNETFEFILDPNQENVLEITLMDANYVMDET LGTATFTVSSMKVGEKKEVPFIFNQVTEMLMSLEVCS CPDLRFSMALCDQEKTFRQQRKEHIRESMKLLGPKNSEGLHSARDVPVVAILGSGGGFRAMVGFSGVMK ALYESGILDCAITYVAGLSGSTWYMSTLYSHPDFPEKGPEEINEELMKNVSHNPLLLLTPQVKRYVESLW KKKSSGQPVFTFDIFGMLIGETLIHNRMTTSSLKEKVNTAQCPPLFTCLHVKPDVSELMFADWVEFS PYEIGMAKYGTMAPDLFGSKFFMGTVVKKYEENPLHFLMGVWGSASFILFNRVLGVSGSQSRGSTMEEE LENITTKHIVSNDSSDDESHEPKGTENEDAGSDYQSDNQASWIHRMIMALVSDSALFNTREGRAGKVH NFMLGLNLNTSYPLSPLSDFATQDSFDDDELDAVADPDEFERIEPLDVKSKIHVVDSGLTFNLPYPL ILRPQRGVDLIIISFDFSARPSDSSPPFKELLLAEKWAKMNKLPFKIDPYVFDREGLKECYVFKPKNPDM EKDCPTIIHFVLANINFRKYKAPGVPRETEEEKEIADFDFDDPESPFSTFNFQYPNQAFKRLHDLMHFN TLNNDIVIKEAMVESIEYRRQNSRCSVLSNVEARRFFNKEFLSKPKA |
| | TRTRPLEQKLI SEEDLAANDILDYKDDDDKV |
| Tag: | C-Myc/DDK |
| Purity: | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| Concentration: | >0.05 µg/µL as determined by microplate BCA method |
| Labeling Method: | Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine |
| Buffer: | 25 mM Tris-HCl, 100 mM glycine, pH 7.3 |
| Storage: | Store at -80°C. Avoid repeated freeze-thaw cycles. |
| Stability: | Stable for 3 months from receipt of products under proper storage and handling conditions. |
| RefSeq: | NP_077734 |



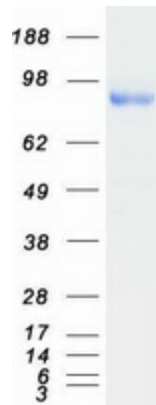
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| | |
|---------------|-----------------------------------|
| RefSeq Size: | 2875 |
| RefSeq ORF: | 2247 |
| Synonyms: | cPLA2; cPLA2-alpha; GURDP; PLA2G4 |
| Locus ID: | 5321 |
| UniProt ID: | P47712 |
| Cytogenetics: | 1q31.1 |

Summary: This gene encodes a member of the cytosolic phospholipase A2 group IV family. The enzyme catalyzes the hydrolysis of membrane phospholipids to release arachidonic acid which is subsequently metabolized into eicosanoids. Eicosanoids, including prostaglandins and leukotrienes, are lipid-based cellular hormones that regulate hemodynamics, inflammatory responses, and other intracellular pathways. The hydrolysis reaction also produces lysophospholipids that are converted into platelet-activating factor. The enzyme is activated by increased intracellular Ca(2+) levels and phosphorylation, resulting in its translocation from the cytosol and nucleus to perinuclear membrane vesicles. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2015]

Protein Pathways: alpha-Linolenic acid metabolism, Arachidonic acid metabolism, Ether lipid metabolism, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Glycerophospholipid metabolism, GnRH signaling pathway, Linoleic acid metabolism, Long-term depression, MAPK signaling pathway, Metabolic pathways, Vascular smooth muscle contraction, VEGF signaling pathway

Product images:



Coomassie blue staining of purified PLA2G4A protein (Cat# [TP320972]). The protein was produced from HEK293T cells transfected with PLA2G4A cDNA clone (Cat# [RC220972]) using MegaTran 2.0 (Cat# [TT210002]).