Datasheet for ABIN7563567

PLA2G6 Protein (AA 1-807) (His tag)

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Overview

Quantity:	1 mg
Target:	PLA2G6
Protein Characteristics:	AA 1-807
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PLA2G6 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Pla2g6 Protein expressed in mammalien cells.
Sequence:	MQFFGRLVNT LSSVTNLFSN PFRVKEVSLT DYVSSERVRE EGQLILLQNV SNRTWDCVLV SPRNPQSGFR LFQLESEADA LVNFQQFSSQ LPPFYESSVQ VLHVEVLQHL TDLIRNHPSW TVTHLAVELG IRECFHHSRI ISCANSTENE EGCTPLHLAC RKGDSEILVE LVQYCHAQMD VTDNKGETAF HYAVQGDNPQ VLQLLGKNAS AGLNQVNNQG LTPLHLACKM GKQEMVRVLL LCNARCNIMG PGGFPIHTAM KFSQKGCAEM IISMDSNQIH SKDPRYGASP LHWAKNAEMA RMLLKRGCDV DSTSSSGNTA LHVAVMRNRF DCVMVLLTYG ANAGARGEHG NTPLHLAMSK DNMEMVKALI VFGAEVDTPN DFGETPALIA SKISKLITRK ALLTLLKTVG ADHHFPIIQG VSTEQGSAAA THPLFSLDRT QPPAISLNNL ELQDLMPISR ARKPAFILSS MRDEKRSHDH LLCLDGGGVK GLVIIQLLIA IEKASGVATK DLFDWVAGTS TGGILALAIL HSKSMAYMRG VYFRMKDEVF RGSRPYESGP LEEFLKREFG EHTKMTDVKK PKVMLTGTLS DRQPAELHLF RNYDAPEAVR EPRCNQNINL KPPTQPADQL VWRAARSSGA APTYFRPNGR FLDGGLLANN

Product Details

	PTLDAMTEIH EYNQDMIRKG QGNKVKKLSI VVSLGTGKSP QVPVTCVDVF RPSNPWELAK TVFGAKELGK MVVDCCTDPD GRAVDRARAW CEMVGIQYFR LNPQLGSDIM LDEVSDAVLV NALWETEVYI YEHREEFQKL VQLLLSP **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	PLA2G6
Alternative Name:	Pla2g6 (PLA2G6 Products)
Background:	85/88 kDa calcium-independent phospholipase A2 (CaI-PLA2) (EC 3.1.1.4) (2-lysophosphatidylcholine acylhydrolase) (EC 3.1.1.5) (Group VI phospholipase A2) (GVI PLA2) (Intracellular membrane-associated calcium-independent phospholipase A2 beta) (iPLA2-beta) (Palmitoyl-CoA hydrolase) (EC 3.1.2.2) (Patatin-like phospholipase domain-containing protein 9) (PNPLA9),FUNCTION: Calcium-independent phospholipase involved in phospholipid remodeling with implications in cellular membrane homeostasis, mitochondrial integrity and signal transduction. Hydrolyzes the ester bond of the fatty acyl group attached at sn-1 or sn-2 position of phospholipids (phospholipase A1 and A2 activity respectively), producing lysophospholipids

Target Details

	that are used in deacylation-reacylation cycles (PubMed:18937505). Hydrolyzes both saturated and unsaturated long fatty acyl chains in various glycerophospholipid classes such as phosphatidylcholines, phosphatidylethanolamines and phosphatidates, with a preference for hydrolysis at sn-2 position. Can further hydrolyze lysophospholipids carrying saturated fatty acyl chains (lysophospholipase activity). Upon oxidative stress, contributes to remodeling of mitochondrial phospholipids in pancreatic beta cells, in a repair mechanism to reduce oxidized lipid content (By similarity). Preferentially hydrolyzes oxidized polyunsaturated fatty acyl chains from cardiolipins, yielding monolysocardiolipins that can be reacylated with unoxidized fatty acyls to regenerate native cardiolipin species. Hydrolyzes oxidized glycerophosphoethanolamines present in pancreatic islets, releasing oxidized polyunsaturated fatty acids such as hydroxyeicosatetraenoates (HETEs) (PubMed:24648512). Has thioesterase activity toward fatty-acyl CoA releasing CoA-SH known to facilitate fatty acid transport and beta-oxidation in mitochondria particularly in skeletal muscle (PubMed:18937505). Plays a role in regulation of membrane dynamics and homeostasis. Selectively hydrolyzes sn-2 arachidonoyl group in plasmalogen phospholipids, structural components of lipid rafts and myelin (By similarity). Regulates F-actin polymerization at the pseudopods, which is required for both speed and directionality of MCP1/CCL2-induced monocyte chemotaxis (By similarity). Targets membrane phospholipids to produce potent lipid signaling messengers. Generates lysophosphatidate (LPA, 1-acyl-glycerol-3-phosphate), which acts via G-protein receptors in various cell types. Has phospholipase A2 activity toward platelet-activating factor (PAF, 1-O-alkyl-2-acetyl-sn-glycero-3-phosphocholine), likely playing a role in inactivation of this potent pro-inflammatory signaling lipid (By similarity). In response to glucose, amplifies calcium influx in pancreatic beta cells to promote INS secretion (PubMed:17895289). {ECO:0000250|UniProtKB:A0A3L7I2I8, ECO:0000250|UniProtKB:O60733, ECO:0000269|PubMed:17895289, ECO:0000269|PubMed:18937505, ECO:0000269|PubMed:24648512}.
Molecular Weight:	89.6 kDa
UniProt:	P97819
Pathways:	Positive Regulation of Peptide Hormone Secretion

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

