

Recombinant Human Phospholipase A2, Group IB (Pancreas), His-tagged

Cat. No. PLA2G1B-66H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Secreted Phospholipase A2-IB produced in <i>E. Coli</i> manufactured with N-terminal fusion His-tagged. sPLA2-IB His-Tagged Fusion Protein is 16 kDa containing 126 amino acid residues of the human secreted phospholipase A2-IB and 16 additional amino acid residues – His-tagged.
Species	Human
Source	E.coli
Description	Group IB secretory phospholipase A2 (sPLA2-IB) mediates cell proliferation, cell migration, hormone release and eicosanoid production via its receptor in peripheral tissues. In the CNS, high-affinity binding sites of sPLA2-IB have been documented. sPLA2-IB induced neuronal cell death in a concentration dependent manner depending on PGD2 metabolites, especially Delta12-PGJ2 that might mediate sPLA2-IB-induced apoptosis. The secretory PLA2 (sPLA2) family, consists of low molecular weight, Ca ²⁺ -requiring secretory enzymes that have been implicated in a number of biological processes.
Amino Acid Sequence	MRGSHHHHHH GMASHMAVWQ FRKMIKCVIP GSDPFLEYNN YGCYCGLGGS GTPVDELDKC CQTHDNCYDQ AKKLDSCCKFL LDNPYHTYYS YSCSGSAITC SSKNKECEAF ICNCDRNAAI CFSKAPYNKA HKNLDTKKYC QS.
Physical Appearance	Sterile Filtered lyophilized (freeze-dried) powder.

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Purification Method	Three-step procedure using affinity Ni-NTA chromatography and size exclusion chromatography before and after refolding.
Purity	Greater than 95% as determined by SDS-PAGE.
Formulation	Sterile filtered and lyophilized from 0.5 mg/ml in 0.05M Acetate buffer pH-4.
Solubility	Add 0.2ml of 0.1M Acetate buffer pH-4 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10µg/ml. In higher concentrations the solubility of this antigen is limited.
Specificity	The amino acid sequence of the recombinant human Secreted Phospholipase A2-IB is 100% homologous to the amino acid sequence of the human Secreted Phospholipase A2-IB.
Applications	Western blotting.
Stability	Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C. The lyophilized protein remains stable until the expiry date when stored at -20°C.

GENE INFORMATION

Gene Name	PLA2G1B phospholipase A2, group IB (pancreas) [Homo sapiens]
Synonyms	PLA2; PLA2A; PPLA2; MGC119834; MGC119835; PLA2G1B;phospholipase A2 group IB; phosphatidylcholine 2-acylhydrolase
Gene ID	5319

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mRNA Refseq	NM_000928
Protein Refseq	NP_000919
MIM	172410
UniProt ID	P04054
Chromosome Location	12q23-q24.1
Pathway	Arachidonic acid metabolism; Ether lipid metabolism; Fc epsilon RI signaling pathway; Linoleic acid metabolism; Long-term depression; MAPK signaling pathway; Metabolic pathways; VEGF signaling pathway; Vascular smooth muscle contraction; alpha-Linolenic acid metabolism; Glycerophospholipid metabolism; GnRH signaling pathway
Function	bile acid binding; calcium ion binding; calcium-dependent phospholipase A2 activity; cell surface binding; hydrolase activity; receptor binding