

Recombinant Human PLA2G1B/PLA2 Protein (His Tag)

Catalog No. PKSH031384

Note: Centrifuge before opening to ensure complete recovery of vial contents.

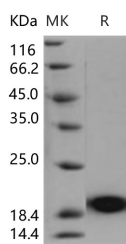
Description

Synonyms	PLA2G1B;Phospholipase A2;Group IB phospholipase A2;PLA2;PLA2A;PPLA2
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Ser 148
Accession	NP_000919.1
Calculated Molecular Weight	16.2 kDa
Observed molecular weight	19 kDa
Tag	C-His
Bioactivity	Measured by its ability to hydrolyze 1-Hexadecanoyl-2-(1-pyrenedecanoyl)-sn-glycero-3-phosphomethanol. The specific activity is > 2, 500 pmol/min/μg.

Properties

Purity	> 92 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 10mM Tris, 5mM CaCl ₂ , pH 8.0 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 92 % as determined by reducing SDS-PAGE.

Background

phospholipase A2, also known as Phosphatidylcholine 2-acylhydrolase 1B, Group IB phospholipase A2, PLA2 and

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PLA2G1B, is a secreted protein which belongs to the phospholipase A2 family. Phospholipase A2 / PLA2G1B catalyzes the release of fatty acids from glycerol-3-phosphocholines. The best known varieties are the digestive enzymes secreted as zymogens by the pancreas of mammals. Sequences of pancreatic Phospholipase A2 / PLA2G1B enzymes from a variety of mammals have been reported. One striking feature of these enzymes is their close homology to venom phospholipases of snakes. Other forms of Phospholipase A2 / PLA2G1B have been isolated from brain, liver, lung, spleen, intestine, macrophages, leukocytes, erythrocytes, inflammatory exudates, chondrocytes, and platelets. Mice lacking in Phospholipase A2 / PLA2G1B are resistant to obesity and diabetes induced by feeding a diabetogenic high-fat/high-carbohydrate diet. Oral supplementation of a diabetogenic diet with the PLA2G1B inhibitor methyl indoxam effectively suppresses diet-induced obesity and diabetes. PLA2G1B inhibition may be a potentially effective oral therapeutic option for treatment of obesity and diabetes.