For Research Use Only

Recombinant Human PLA2G1B protein (rFc Tag) (HPLC verified)

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Catalog Number: Eg3075

Basic Information

Species:
Human

Purity:
>90 %, SDS-PAGE
 >90 %, SEC-HPLC

Tag:
rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE
 >90 %, SEC-HPLC

Endotoxin Level:
<0.1 EU/ μg protein, LAL method

Source:
HEK293-derived Human PLA2G1B protein Asp16-Ser148 (Accession# P04054) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
5319

Accession:
P04054

Predicted Molecular Mass:
40.9 kDa

SDS-PAGE:
38-45 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

PLA2G1B was initially named pancreatic PLA2 due to its primary production in pancreatic tissue. Two forms of PLA2G1B are present in the pancreas, the intestinal tract, and human plasma. It is expressed as an inactive precursor called proPLA2G1B, which contains a propeptide in the N-terminal part that masks the active site of PLA2G1B and blocks the access of the lipid substrate to the catalytic site of the protein. Upon digestion by a trypsin protease, the propeptide is removed to generate the active form of PLA2G1B (active PLA2G1B). PLA2G1B is a secreted enzyme regulating lipid metabolism through the hydrolysis of phospholipids.

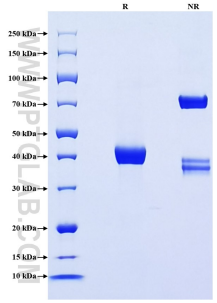
References

1.Palma M. et al. (2017) Cell Host Microbe. 22(5):717.
2.Ewers M. et al. (2022) Pancreatology. 22(2):244-247.
3.Pothlichet J. et al. (2022) Front Immunol. 13:824746.

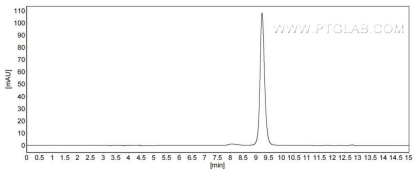
Synonyms

EC:3.1.1.4, Phosphatidylcholine 2-acylhydrolase 1B, PLA2

Selected Validation Data



Purity of Recombinant Human PLA2G1B was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



The purity of Human PLA2G1B was greater than 90% as determined by SEC-HPLC.