Human LYPLA2 / APT-2 Protein (His Tag)

Catalog Number: **12360-H07E**

General Information

Gene Name Synonym:

APT-2; APT2; DJ886K2.4

Protein Construction:

A DNA sequence encoding the human LYPLA2 (O95372) (Met 1-Val 231) was expressed, with a polyhistide tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 96 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human LYPLA2 consisting of 242 amino acids and has a calculated molecular mass of 26.2 kDa as migrated in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris, 0.05% Bring, pH 8.2

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

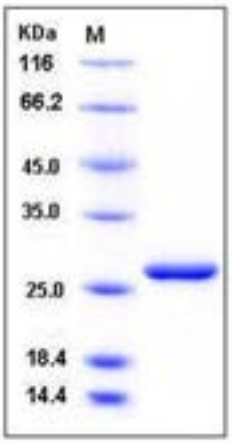
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Lysophospholipase II (LYPLA2, LPL-II, or LysoPLA II), also known as Acyl-protein thioesterase 2 (APT-2), belongs to the AB hydrolase 2 family. This enzyme has lysophospholipase activity, and may hydrolyze fatty acids from S-acylated cysteine residues in proteins such as trimeric G alpha proteins or HRAS. Acyl-protein thioesterase 1 (APT-1) and Acyl-protein thioesterase 2 (APT-2) are cytosolic lysophospholipid hydrolyzing enzymes. The serum activity of APT-1 may play an important role in determination of the concentration of des-acyl ghrelin in circulation, especially under septic inflammation. APT-2/LYPLA2 is expressed both in CHO-K1 and HeLa cells and its overexpression increased the deacylation rate of single acylated GAP-43 and affected the steady-state localization of diacylated GAP-43 and H-Ras. Thus, the results demonstrate that APT-2/LYPLA2 is the protein thioesterase involved in the acylation/deacylation cycle operating in GAP-43 subcellular distribution.