

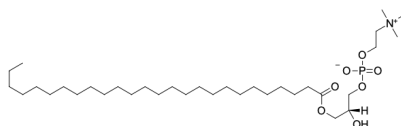
C26:0-lysophosphatidylcholine (LPC)

<http://www.lumiprobe.com/p/c26-lpc-1213783-80-2>

Lysopc(26:0), also known as LysoPC a C26:0, is classified as a member of the 1-acyl-sn-glycero-3-phosphocholines. 1-acyl-sn-glycero-3-phosphocholines are glycerophosphocholines in which the glycerol is esterified with a fatty acid at O-1 position, and linked at position 3 to a phosphocholine. Lysopc(26:0) can be used as internal standard LC-MS studies.

Lysophosphatidylcholines (LPCs) specifically bind to G protein-coupled receptors GPR119, GPR40, GPR55 and GPR4. Binding of LPCs to GPR119, GPR40 and GPR55 induces intracellular calcium mobilization and leads to increased glucose-stimulated insulin secretion in different cell systems. In blood or plasma LPCs are bound mainly to albumin and to a lesser extent to lipoproteins.

Inflammation, cell damage and other pathophysiological conditions can profoundly alter the ratio of free to albumin bound LPC through increased production of LPC or decreased plasma levels of albumin. In particular, lower levels of albumin (hypoalbuminemia) lead to lower levels of LPC in the blood. Lysopc(26:0) is a biomarker for X-linked Adrenoleukodystrophy (X-ALD). Lysopc(26:0) could be used as auxiliary marker for diagnosis of peroxisomal β -oxidation disorders.



Structure of Lyso-PC 26:0

General properties

Appearance: white powder

Molecular weight: 635.90

CAS number: 1213783-80-2

Molecular formula: $C_{34}H_{70}NO_7P$

IUPAC name: [(2R)-3-hexacosanoyloxy-2-hydroxypropyl] 2-(trimethylazaniumyl)ethyl phosphate

Quality control: NMR 1H and HPLC-MS (95+%)

Storage conditions: 24 months after receipt at $-20^{\circ}C$ in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

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