

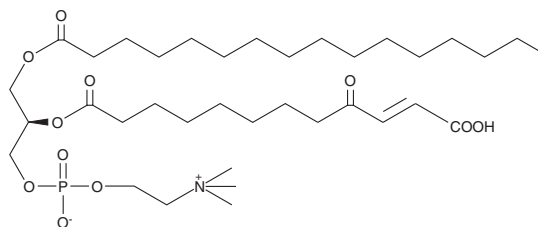
PRODUCT INFORMATION



KDdiA-PC

Item No. 62935

CAS Registry No.: 439904-34-4
Formal Name: 1-palmitoyl-2-(4-keto-dodec-3-ene-diyl)phosphatidylcholine
MF: C₃₆H₆₆NO₁₁P
FW: 719.9
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -80°C
Stability: ≥1 year



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

KDdiA-PC is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of KDdiA-PC in these solvents is approximately 0.5 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of KDdiA-PC is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of KDdiA-PC in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Oxidized low-density lipoprotein (oxLDL) particles contain low molecular weight species which are cytotoxic and pro-atherogenic.¹ Many of these substances were recently isolated and purified from oxLDL, and identified as phosphatidylcholine species containing a fragmented, oxidized short-chain fatty acid remnant at the *sn*-2 position.² KDdiA-PC is one of the most potent CD36 ligands among the oxLDL species.³ KDdiA-PC confers CD-36 scavenger receptor binding affinity to LDL at a frequency of only two to three KDdiA-PC molecules/LDL particle, and may be one of the more important structural determinants of oxLDL.

References

1. Podrez, E.A., Febbraio, M., Sheibani, N., *et al.* Macrophage scavenger receptor CD36 is the major receptor for LDL modified by monocyte-generated reactive nitrogen species. *J. Clin. Invest.* **105(8)**, 1095-1108 (2000).
2. Podrez, E.A., Poliakov, E., Shen, Z., *et al.* A novel family of atherogenic oxidized phospholipids promotes macrophage foam cell formation *via* the scavenger receptor CD36 and is enriched in atherosclerotic lesions. *J. Biol. Chem.* **277(41)**, 38517-38523 (2002).
3. Podrez, E.A., Poliakov, E., Shen, Z., *et al.* Identification of a novel family of oxidized phospholipids that serve as ligands for the macrophage scavenger receptor CD36. *J. Biol. Chem.* **277(41)**, 38503-38516 (2002).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/25/2017

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM