PRODUCT INFORMATION



Palmitoylcholine (chloride)

Item No. 9003456

CAS Registry No.: 2932-74-3

Formal Name: N,N,N-trimethyl-2-[(1-

oxohexadecyl)oxyl-

ethanaminium, monochloride

MF: C₂₁H₄₄NO₂ • CI

378.0 FW: **Purity:** ≥95%

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥2 years

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

• CI

Laboratory Procedures

Palmitoylcholine (chloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the palmitoylcholine (chloride) in the solvent of choice, which should be purged with an inert gas. Palmitoylcholine (chloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of palmitoylcholine (chloride) in ethanol and DMF is approximately 20 mg/ml and approximately 14 mg/ml in DMSO.

Description

Palmitoylcholine is an acyl choline. It inhibits protein kinase C activity when used at a concentration of 100 μM.² Palmitoylcholine induces hemolysis in rat erythrocytes.³ Plasma levels of palmitoylcholine are decreased in female patients with myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS).2

References

- 1. Germain, A., Barupal, D.K., Levine, S.M., et al. Comprehensive circulatory metabolomics in ME/CFS reveals disrupted metabolism of acyl lipids and steroids. Metabolites 10(1), 34 (2020).
- 2. Nakadate, T. and Blumberg, P.M. Modulation by palmitoylcarnitine of protein kinase C activation. Cancer Res. 47(24 Pt 1), 6537-6542 (1987).
- Cho, K.S. and Proulx, P. Interactions of acyl carnitines and other lysins with erythrocytes and reconstituted erythrocyte lipoproteins. Biochim. Biophys. Acta 318(1), 50-60 (1973).

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

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.

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