

# PRODUCT INFORMATION



## 1,2-Dierucoyl-*sn*-glycero-3-PC

Item No. 25728

CAS Registry No.: 51779-95-4

Formal Name: 4-hydroxy-N,N,N-trimethyl-10-oxo-7R-[[[(13Z)-1-oxo-13-docosen-1-yl]oxy]-3,5,9-trioxa-4-phosphahentriacont-22Z-en-1-aminium, 4-oxide, inner salt

Synonyms: DEPC, 1,2-Dierucoyl-*sn*-glycero-3-Phosphocholine, PC(22:1(13Z)/22:1(13Z))

MF: C<sub>52</sub>H<sub>100</sub>NO<sub>8</sub>P

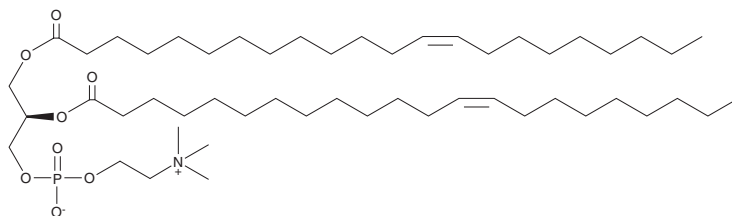
FW: 898.3

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

### Laboratory Procedures

1,2-Dierucoyl-*sn*-glycero-3-PC (DEPC) is supplied as a solid. A stock solution may be made by dissolving the DEPC in the solvent of choice, which should be purged with an inert gas. DEPC is soluble in the organic solvent ethanol at a concentration of approximately 30 mg/ml.

### Description

DEPC is a phospholipid containing erucic acid (docosenoic acid; Item No. 90175) at the *sn*-1 and *sn*-2 positions. It has been used in the study of lipid membranes and to determine the effect of long-chain phospholipids on the secondary structure of human islet amyloid polypeptide (hIAPP).<sup>1-3</sup>

### References

1. Mathai, J.C., Tristram-Nagle, S., Nagle, J.F., *et al.* Structural determinants of water permeability through the lipid membrane. *J. Gen. Physiol.* **131**(1), 69-76 (2008).
2. Bolivar, J.H., Muñoz-García, J.C., Castro-Dopico, T., *et al.* Interaction of lipids with the neurotensin receptor 1. *Biochim. Biophys. Acta* **1858**(6), 1278-1287 (2016).
3. Scollo, F., Tempra, C., Lolicato, F., *et al.* Phospholipids critical micellar concentrations trigger different mechanisms of intrinsically disordered proteins interaction with model membranes. *J. Phys. Chem. Lett.* **9**(17), 5125-5129 (2018).

#### 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.

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