PRODUCT INFORMATION



sn-glycero-3-Phosphocholine-do

Item No. 26099

CAS Registry No.: Formal Name:	2260669-07-4 2-[[[(2R)-2,3-dihydroxypropoxy]hydroxyphosphinyl]oxy]-
	$N,N,N-tri(methyl-d_3)$ -ethanaminium, inner salt
Synonyms:	Glycerophosphocholine-d ₉ , L- α -Glycerophosphorylcholine-d ₉ , D L- α -GPC-d ₉ , sn-glycero-3-PC-d ₉
MF:	$C_8H_{11}D_9NO_6P$
FW:	
Chemical Purity:	≥95% (sn-glycero-3-Phosphocholine)
Deuterium	D OH
Incorporation:	≥99% deuterated forms (d ₁ -d ₉); ≤1% d ₀
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

sn-glycero-3-Phosphocholine-do is intended for use as an internal standard for the quantification of sn-glycero-3-phosphocholine (Item No. 20736) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

sn-glycero-3-Phosphocholine-do is supplied as a solid. A stock solution may be made by dissolving the sn-glycero-3-phosphocholine- d_{9} in the solvent of choice, which should be purged with an inert gas. sn-glycero-3-Phosphocholine-do is slightly soluble in methanol.

Description

sn-glycero-3-Phosphocholine is a nootropic phospholipid, a precursor to choline biosynthesis, and an intermediate in the metabolism of phosphatidylcholine.¹ In vivo, sn-glycero-3-phosphocholine is converted to phosphorylcholine, a metabolically active form of choline that increases acetylcholine synthesis and release in rat hippocampus. It prevents scopolamine-induced amnesia in a passive avoidance test in rats and exerts neuroprotective effects in models of altered cholinergic neurotransmission and models of brain vascular injury.^{1,2}

References

- 1. Traini, E., Bramanti, V., and Amenta, F. Choline alphoscerate (alpha-glyceryl-phosphoryl-choline) an old choline- containing phospholipid with a still interesting profile as cognition enhancing agent. Curr. Alzheimer Res. 10(10), 1070-1079 (2013).
- 2 Sigala, S., Imperato, A., Rizzonelli, P., et al. L-α-glycerylphosphorylcholine antagonizes scopolamineinduced amnesia and enhances hippocampal cholinergic transmission in the rat. Eur. J. Pharmacol. 211(3), 351-358 (1992).

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

SAFFTY 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

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