Product Data Sheet

Product Name: Palmitoyl coenzyme A lithium
Cat. No.: GC67659

Chemical Properties

Cas. No.	188174-64-3		
Formula	$C_{37}H_{66}N_7O_{17}P_3S.xLi$	M.Wt	
Solubility		Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Palmitoyl coenzyme A lithium		

Background

Palmitoyl coenzyme A lithium is an acyl-CoA thioester that can be transported into the mitochondrial matrix via the carnitine shuttle system and is involved in β-oxidation. Palmitoyl coenzyme A lithium can also be used as a substrate for sphingosine biosynthesis[1][2].

Palmitoyl coenzyme A lithium (100 μM) reversibly inhibits acetyl coenzyme A carboxylase activity from chicken hepatocytes and is competitive with citric acid and has an important role in the regulation of fatty acid synthesis in vivo[1].
Palmitoyl coenzyme A lithium with a high levels in mitochondria reduces the entry of ADP, which leads to an increased inhibition of glutamate dehydrogenase by palmitoyl CoA[2].

[1]. A G Goodridge, et al. Regulation of the activity of acetyl coenzyme A carboxylase by palmitoyl coenzyme A and citrate. J Biol Chem. 1972 Nov 10;247(21):6946-52.
[2]. L A Fahien, et al. Regulation of glutamate dehydrogenase by palmitoyl-coenzyme A. Arch Biochem Biophys. 1981 Nov;212(1):247-53.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA