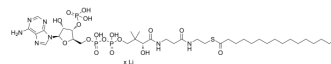


## Palmitoyl coenzyme A lithium

<b>Cat. No.:</b>	HY-134427
<b>CAS No.:</b>	188174-64-3
<b>Molecular Formula:</b>	C <sub>37</sub> H <sub>66</sub> N <sub>7</sub> O <sub>17</sub> P <sub>3</sub> S.xLi
<b>Target:</b>	Endogenous Metabolite
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### BIOLOGICAL ACTIVITY

<b>Description</b>	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 $\beta$ -oxidation. Palmitoyl coenzyme A lithium can also be used as a substrate for sphingosine biosynthesis <sup>[1][2]</sup> .
<b>In Vitro</b>	Palmitoyl coenzyme A lithium (100 $\mu$ M) 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 <sup>[1]</sup> . 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 <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [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.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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