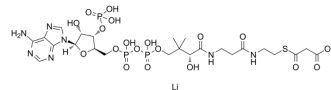


Malonyl CoA lithium

Cat. No.:	HY-136408
CAS No.:	108347-84-8
Molecular Formula:	C ₂₄ H ₃₈ N ₇ O ₁₉ P ₃ S.xLi
Target:	Mitochondrial Metabolism
Pathway:	Metabolic Enzyme/Protease
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	PBS : 10 mg/mL (adjust pH to 7.2)
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BIOLOGICAL ACTIVITY

Description	Malonyl CoA (Malonyl Coenzyme A) lithium is an inhibitor of carnitine palmitoyl transferase 1 (CPT1). High Malonyl CoA lithium concentrations suppress fatty acid oxidation, while low Malonyl CoA lithium concentrations are permissive for fat oxidation ^[1] .
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IC₅₀ & Target	Carnitine palmitoyl transferase 1 (CPT1) ^[1]
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In Vitro	Incubation of myotubes with Malonyl CoA lithium (with a polyamine carrier) prevents insulin-stimulated glucose transport and inhibits palmitate oxidation ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay ^[1]
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Cell Line:	Myotubes
Concentration:	10 μM
Incubation Time:	30 min
Result:	Prevented insulin-stimulated glucose transport and inhibited palmitate oxidation.

REFERENCES

[1]. Patil PB, et al. Malonyl coenzyme A affects insulin-stimulated glucose transport in myotubes. Arch Physiol Biochem. 2007 Feb;113(1):13-24.

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

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