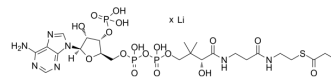


Propionyl coenzyme A lithium

Cat. No.:	HY-134424
CAS No.:	108321-21-7
Molecular Formula:	C ₂₄ H ₄₀ N ₇ O ₁₇ P ₃ S.xLi
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Propionyl coenzyme A lithium, a coenzyme A derivative of propionic acid, is an important metabolic intermediate formed by the thioester bond between coenzyme A and propionic acid. The breakdown and production of Propionyl coenzyme A lithium is important for the metabolism of organisms ^{[1][2]} .
In Vitro	<p>Propionyl coenzyme A lithium causes toxic effects due to its accumulation and the impact of its metabolism on cell wall synthesis and maintenance in Mycobacterium tuberculosis^[1].</p> <p>Propionyl coenzyme A lithium can be converted to β-hydroxypropionic acid via a peroxisomal enzyme-modified β-oxidation pathway in Arabidopsis^[2].</p> <p>Propionyl coenzyme A lithium causes the formation of propionic acidemia due to its abnormal accumulation, which often occurs in the neonatal developmental stage^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

- [1]. Ernesto J Muñoz-Elías, et al. Role of the methylcitrate cycle in Mycobacterium tuberculosis metabolism, intracellular growth, and virulence. *Mol Microbiol.* 2006 Jun;60(5):1109-22.
- [2]. Kerry A Lucas, et al. Peroxisomal metabolism of propionic acid and isobutyric acid in plants. *J Biol Chem.* 2007 Aug 24;282(34):24980-9.
- [3]. Oleg A Shchelochkov, et al. Propionic Acidemia. 2012 May 17 [updated 2016 Oct 6]. In: Adam MP, Everman DB, Mirzaa GM, Pagon RA, Wallace SE, Bean LJH, Gripp KW, Amemiya A, editors. *GeneReviews*® [Internet]. Seattle (WA): University of Washington, Seattle; 1993–2022.

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

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