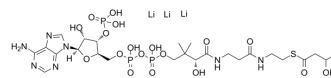


DL-β-Hydroxybutyryl coenzyme A lithium

Cat. No.:	HY-134426		
CAS No.:	103404-51-9		
Molecular Formula:	C ₂₅ H ₄₂ Li ₃ N ₇ O ₁₈ P ₃ S		
Molecular Weight:	874.45		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description

DL-β-Hydroxybutyryl coenzyme A lithium is an intermediate in the fermentation of butyric acid and the metabolism of lysine and tryptophan, and is produced from β-hydroxybutyric acid by short-chain-CoA synthase^{[1][2]}.

In Vitro

DL-β-Hydroxybutyryl coenzyme A lithium (β-Hydroxybutyryl-CoA) can be produced as an intermediate metabolite via the mitochondrial pathway, where impaired mitochondrial function in cancer cells leads to the accumulation of it. At the same time, DL-β-Hydroxybutyryl coenzyme A lithium can also be produced via the fatty acid β-oxidation, which is accelerated by starvation and fasting, leading to the accumulation of it and thus to diseases caused by certain metabolic adaptations^[1]. DL-β-Hydroxybutyryl coenzyme A lithium (β-Hydroxybutyryl-CoA) can act as a cofactor for lysine β-hydroxybutyrylation (Kbhb), with elevated levels of histone Kbhb in a streptozotocin (STZ)-induced type 1 diabetes mellitus (T1DM) mouse model^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Kevin B Koronowski, et al. Ketogenesis impact on liver metabolism revealed by proteomics of lysine β-hydroxybutyrylation. *Cell Rep.* 2021 Aug 3;36(5):109487.
- [2]. Zhongyu Xie, et al. Metabolic Regulation of Gene Expression by Histone Lysine β-Hydroxybutyrylation. *Mol Cell.* 2016 Apr 21;62(2):194-206.

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

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