Proteins

Product Data Sheet

Dephospho-CoA

Cat. No.: HY-137899 CAS No.: 3633-59-8

Molecular Formula: $C_{21}H_{35}N_7O_{13}P_2S$

Molecular Weight: 687.55

Endogenous Metabolite Target: Pathway: Metabolic Enzyme/Protease Storage: Powder -20°C 3 years

> In solvent -80°C 6 months

-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

H₂O: 50 mg/mL (72.72 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.4544 mL	7.2722 mL	14.5444 mL
	5 mM	0.2909 mL	1.4544 mL	2.9089 mL
	10 mM	0.1454 mL	0.7272 mL	1.4544 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description	Dephospho-CoA is A direct precursor of Coenzyme A (CoA). Dephospho-CoA kinase (DPCK) catalyzes the ATP-dependent phosphorylation of Dephospho-CoA, the final step in coenzyme A (CoA) biosynthesis ^{[1][2]} .
IC ₅₀ & Target	Human Endogenous Metabolite

REFERENCES

[1]. Swift RP, et al. Dephospho-CoA kinase, a nuclear-encoded apicoplast protein, remains active and essential after Plasmodium falciparum apicoplast disruption. EMBO J. 2021 Aug 16;40(16):e107247.

[2]. Shimosaka T, et al. Identification of Dephospho-Coenzyme A (Dephospho-CoA) Kinase in Thermococcus kodakarensis and Elucidation of the Entire CoA Biosynthesis Pathway in Archaea. mBio. 2019 Jul 23;10(4):e01146-19.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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