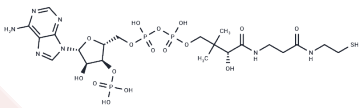
Data Sheet (Cat.No.T10857)

TargetMol

Coenzyme A

Chemical Properties



CAS No. : 85-61-0

Formula: C21H36N7O16P3S

Molecular Weight: 767.53

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Coenzyme A is an obligatory cofactor in all living cells synthesized from pantothenate (Vitamin B5), adenosine triphosphate (ATP), and cysteine.
Targets(IC50)	Endogenous Metabolite,Fatty Acid Synthase
In vitro	Covalent binding of Coenzyme A to Peroxiredoxin 5 (Prdx5) results in complete inhibition of its peroxidase activity, which is reversed by reduction with DTT. Many human pathologies, including cancer, diabetes, and neurodegeneration, have been associated with abnormal biosynthesis and homeostasis of CoA and its derivatives.

Solubility Information

Solubility	DMSO: 102 mg/mL (132.89 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (4.3 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3029 mL	6.5144 mL	13.0288 mL
5 mM	0.2606 mL	1.3029 mL	2.6058 mL
10 mM	0.1303 mL	0.6514 mL	1.3029 mL
50 mM	0.0261 mL	0.1303 mL	0.2606 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Baković J, et al. A key metabolic integrator, coenzyme A, modulates the activity of peroxiredoxin 5 via covalent modification. Mol Cell Biochem. 2019 Aug 2.
Zhao Y, Li Y, Zhu R, et al.RPS15 interacted with IGF2BP1 to promote esophageal squamous cell carcinoma development via recognizing m6A modification.Signal Transduction and Targeted Therapy.2023, 8(1): 224.