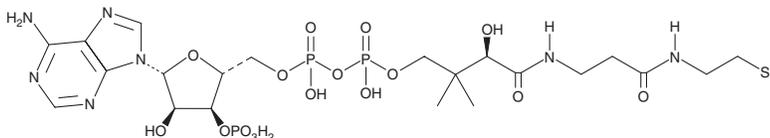


PRODUCT INFORMATION



Coenzyme A Item No. 16147

CAS Registry No.: 85-61-0
Synonym: CoA
MF: $C_{21}H_{36}N_7O_{16}P_3S$
FW: 767.5
Purity: $\geq 90\%$
UV/Vis.: λ_{max} : 259 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Coenzyme A (CoA) is supplied as a crystalline solid. Aqueous solutions of CoA can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of CoA in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

CoA is an essential cofactor functioning as an acyl group carrier and carbonyl-activating group for the citric acid cycle and fatty acid metabolism.¹ About 4% of cellular enzymes utilize CoA as a substrate. It is synthesized from pantothenic acid in a 5-step process that requires ATP.² The pantothenate kinase step of the CoA biosynthetic pathway has been identified as a target for the development of antibacterial compounds.³

References

- Leonardi, R., Zhang, Y.-M., Rock, C.O., et al. Coenzyme A: Back in action. *Prog. Lipid Res.* **44(2-3)**, 125-153 (2005).
- Jackowski, S. Biosynthesis of pantothenic acid and coenzyme A., Chapter 44, in *Escherichia coli and Salmonella typhimurium: Cellular and molecular biology*. Neidhardt, F.C., Curtiss, R., Gross, C.A. et al., editors, American Society for Microbiology, Washington D.C., 687-694 (1996).
- Begley, T.P., Kinsland, C., and Strauss, E. The biosynthesis of coenzyme A in bacteria. *Vitam. Horm.* **61**, 157-171 (2001).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/06/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM