

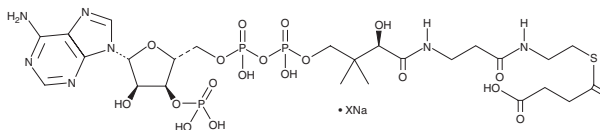
PRODUCT INFORMATION



Succinyl-Coenzyme A (sodium salt)

Item No. 23297

CAS Registry No.: 108347-97-3
Formal Name: S-(hydrogen butanedioate), coenzyme A, sodium salt
Synonym: Succinyl-CoA
MF: C₂₅H₄₀N₇O₁₉P₃S • XNa
FW: 867.6
Purity: ≥95%
UV/Vis.: λ_{max}: 258 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

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

Description

Succinyl-CoA is an intermediate in the citric acid cycle.¹ It is converted to succinate, which is a metabolic intermediate with various biological activities. Succinyl-CoA is required, with glycine, to form δ-aminolevulinic acid in the first step of porphyrin and heme synthesis.² Succinyl-CoA deficiency, caused by vitamin B₁₂ (Item No. 18425) deficiency can disrupt heme and energy production, leading to neuromotor dysfunction.³

References

1. Meister, A. ACYL phosphates as enzyme-bound intermediates in the biosynthesis of glutamine, glutathione, succinyl, coenzyme A, and cabamyl phosphate. *Trans. N. Y. Acad. Sci.* **30(8)**, 1157-1180 (1968).
2. Bonkovsky, H.L., Guo, J.-T., Hou, W., et al. Porphyrin and heme metabolism and the porphyrias. *Compr Physiol* **3(1)**, 365-401 (2013).
3. Bicakci, Z. Growth retardation, general hypotonia, and loss of acquired neuromotor skills in the infants of mothers with cobalamin deficiency and the possible role of succinyl-CoA and glycine in the pathogenesis. *Medicine (Baltimore)* **94(9)**, e584 (2015).

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.

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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