

PRODUCT INFORMATION



Ethylmalonyl Coenzyme A (sodium salt)

Item No. 23503

Formal Name: S-(hydrogen 2-ethylpropanedioate) coenzyme A, sodium salt

Synonym: Ethylmalonyl-CoA

MF: C₂₆H₄₂N₇O₁₉P₃S • XNa

FW: 881.6

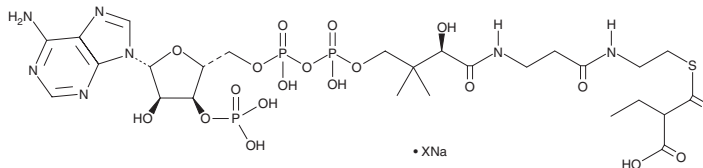
Purity: ≥95%

UV/Vis.: λ_{max}: 257 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

Ethylmalonyl coenzyme A (CoA) (sodium salt) is supplied as a crystalline solid. Aqueous solutions of ethylmalonyl-CoA (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of ethylmalonyl-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

Ethylmalonyl-CoA is a key intermediate in the ethylmalonyl-CoA pathway for carbon metabolism in certain bacteria, such as *M. extorquens*, which uses this pathway when grown on ethylamine.^{1,2} It is produced from crotonyl-CoA by crotonyl-CoA reductase/carboxylase and modified by ethylmalonyl-CoA mutase to make methylsuccinyl-CoA.

References

1. Good, N.M., Martinez-Gomez, N.C., Beck, D.A.C., *et al.* Ethylmalonyl coenzyme A mutase operates as a metabolic control point in *Methylobacterium extorquens* AM1. *J. Bacteriol.* **197**(4), 727-735 (2015).
2. Anthony, C. How half a century of research was required to understand bacterial growth on C₁ and C₂ compounds; the story of the serine cycle and the ethylmalonyl-CoA pathway. *Sci. Prog.* **94**(Pt 2), 109-137 (2011).

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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