

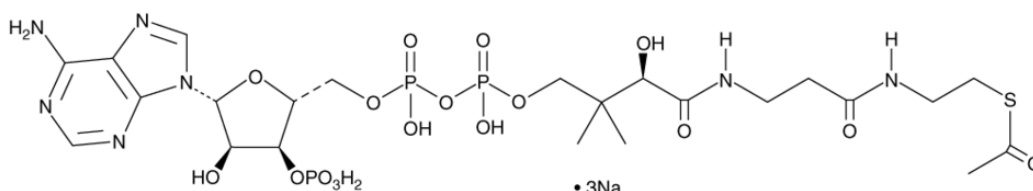
Acetyl Coenzyme A (sodium salt)

08/19

ALTERNATE NAMES: S-[2-[3-[[4-[[[5-(6-aminopurin-9-yl)-4-hydroxy-3-phosphonooxyoxolan-2-yl]methoxy-hydroxyphosphoryl]oxy-hydroxyphosphoryl]oxy-2-hydroxy-3,3-dimethylbutanoyl]amino]propanoylamino]ethyl] ethanethioate, sodium; S-acetate coenzyme A, trisodium salt; Acetyl CoA, trisodium salt; Acetyl-S- CoA, trisodium salt

CATALOG #: B2844-1 1 mg
B2844-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₃H₃₈N₇O₁₇P₃S•3Na

MOLECULAR WEIGHT: 878.5

CAS NUMBER: 102029-73-2

APPEARANCE: A crystalline solid

PURITY: ≥90%

SOLUBILITY: ~10 mg/ml in PBS, pH 7.2

DESCRIPTION: Acetyl-CoA is an essential cofactor and carrier of acyl groups in enzymatic reactions. It is formed either by the oxidative decarboxylation of pyruvate, β-oxidation of fatty acids or oxidative degradation of certain amino acids. It is an intermediate in fatty acid and amino acid metabolism. It is the starting compound for the citric acid cycle. It is a precursor for the neurotransmitter acetylcholine. It is required for acetyltransferases and acyltransferases in the post-translational modification of proteins.

STORAGE TEMPERATURE: -20°C

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Palsson-McDermott, E.M., and O'Neill, L.A. The Warburg effect then and now: From cancer to inflammatory diseases. *BioEssays* 35(11), 965-973 (2013).
2. Akram, M. Citric acid cycle and role of its intermediates in metabolism. *Cell Biochemistry and Biophysics* 68(3), 475-478 (2014).
3. Miura, Y. The biological significance of ω-oxidation of fatty acids. *Proc.Jpn.Acad.Ser.B Phys.Biol.Sci.* 89(8), 370-382 (2013).
4. Zaidi, N., Swinnen, J.V., and Smans, K. ATP-citrate lyase: A key player in cancer metabolism. *Cancer Research* 72(15), 3709-3714 (2012).
5. Salminen, A., Kauppinen, A., Hiltunen, M., et al. Krebs cycle intermediates regulate DNA and histone methylation: Epigenetic impact on the aging process. *Ageing Res.Rev.* 16C, 45-65 (2014).

RELATED PRODUCTS:

β-Nicotinamide adenine dinucleotide sodium salt (Cat. No. 9457)
 S-(5'-Adenosyl)-L-methionine chloride (hydrochloride) (Cat.No. B2826)
 D-(+)-Biotin (Cat. No. 9587)
 L-Ascorbic acid (Cat. No. 2269)
 NADP, disodium salt (Cat. No. 2736)

DISCLAIMER: *FOR RESEARCH USE ONLY! Not to be used on humans.*