

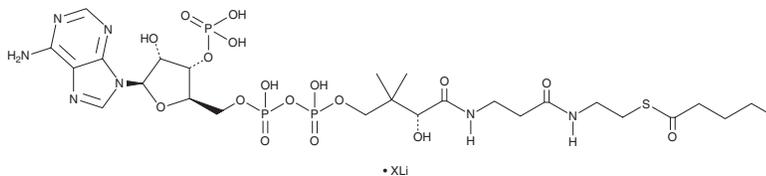
# PRODUCT INFORMATION



## Pentanoyl-Coenzyme A (lithium salt)

Item No. 44598

**CAS Registry No.:** 108392-07-0  
**Formal Name:** S-pentanoate, coenzyme A, lithium salt  
**Synonyms:** C<sub>5</sub>-CoA, Pentanoyl-CoA, Valeryl-CoA, Valeryl-Coenzyme A  
**MF:** C<sub>26</sub>H<sub>44</sub>N<sub>7</sub>O<sub>17</sub>P<sub>3</sub>S • XLi  
**FW:** 851.7  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Special Conditions:** Light sensitive



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

### Laboratory Procedures

Pentanoyl-Coenzyme A (pentanoyl-CoA) (lithium salt) is supplied as a solid. A stock solution may be made by dissolving the pentanoyl-CoA (lithium salt) in the solvent of choice, which should be purged with an inert gas. Pentanoyl-CoA (lithium salt) is sparingly soluble (1-10 mg/ml) in acetonitrile:water (1:1).

### Description

Pentanoyl-CoA is a metabolite of 3-oxovalproyl-CoA and a derivative of CoA (Item Nos. 16147 | 21499 | 21722) that contains the short-chain saturated fatty acid pentanoic acid.<sup>1</sup> It is formed from 3-oxovalproyl-CoA by mitochondrial thiolases. Hepatic levels of pentanoyl-CoA and propionyl-CoA are increased in a model of spontaneous colorectal cancer using *Apc*<sup>+/<sup>Min</sup>-FCCC</sup> -mice fed a low- or high-fat diet.<sup>2</sup>

### References

1. Silva, M.F., Ruiten, J.P., Overmars, H., *et al.* Complete  $\beta$ -oxidation of valproate: Cleavage of 3-oxovalproyl-CoA by a mitochondrial 3-oxoacyl-CoA thiolase. *Biochem. J.* **362**(Pt 3), 755-760 (2002).
2. Dazard, J.-E., Sandlers, Y., Doerner, S.K., *et al.* Metabolomics of *Apc*<sup>Min/+</sup> mice genetically susceptible to intestinal cancer. *BMC Syst. Biol.* **8:72**, (2014).

#### 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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