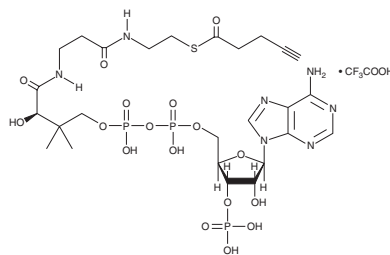


# PRODUCT INFORMATION

## 4-pentynoyl-Coenzyme A (trifluoroacetate salt)

Item No. 10547

**Formal Name:** S-4-pentynoate coenzyme A, trifluoroacetate salt  
**Synonym:** Click Tag™ 4-pentynoyl-CoA  
**MF:** C<sub>26</sub>H<sub>40</sub>N<sub>7</sub>O<sub>17</sub>P<sub>3</sub>S • CF<sub>3</sub>COOH  
**FW:** 961.6  
**Purity:** ≥95%  
**Supplied as:** A lyophilized powder  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

4-pentynoyl-CoA (trifluoroacetate salt) is supplied as a lyophilized powder. For biological experiments, we suggest that organic solvent-free aqueous solutions of 4-pentynoyl-CoA (trifluoroacetate salt) be prepared by directly dissolving the lyophilized powder in water. The solubility of 4-pentynoyl-CoA (trifluoroacetate salt) in water is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Protein acetylation is a reversible, post-translational modification regulated by lysine acetyltransferases and deacetylases and plays a key role in regulating gene expression. 4-pentynoyl-CoA (trifluoroacetate salt) is an alkyne-derivatized acetyl-CoA reporter that enables rapid detection of acetylated proteins *in vitro*.<sup>1</sup> As an acyl-CoA donor, the 4-pentynoyl analog is metabolically transferred onto lysine residues of proteins by lysine acetyltransferases. An azide-alkyne bioconjugation reaction, known as click chemistry, can then be used to readily tag acetylated proteins with fluorescent or biotinylated labels for subsequent analysis.<sup>2</sup>

### References

1. Yang, Y.-Y., Ascano, J.M., and Hang, H.C. Bioorthogonal chemical reporters for monitoring protein acetylation. *J. Am. Chem. Soc.* **132**, 3640-3641 (2010).
2. Kolb, H.C. and Sharpless, K.B. The growing impact of click chemistry on drug discovery. *Drug Discov. Today* **8(24)**, 1128-1137 (2003).

#### 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

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