

# PRODUCT INFORMATION



## AMARA Peptide (trifluoroacetate salt)

Item No. 36894

**Formal Name:** L-alanyl-L-methionyl-L-alanyl-L-arginyl-L-alanyl-L-alanyl-L-seryl-L-alanyl-L-alanyl-L-alanyl-L-leucyl-L-alanyl-L-arginyl-L-arginyl-L-arginine, trifluoroacetate salt

**Synonyms:** AMARAASAAALARRR-OH, H-Ala-Met-Ala-Arg-Ala-Ala-Ser-Ala-Ala-Ala-Leu-Ala-Arg-Arg-Arg-OH

**MF:** C<sub>62</sub>H<sub>115</sub>N<sub>27</sub>O<sub>17</sub>S • XCF<sub>3</sub>COOH

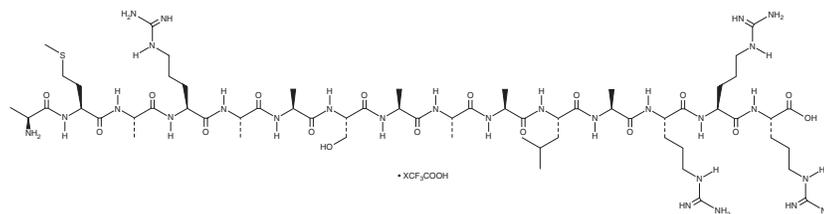
**FW:** 1,542.8

**Purity:** ≥95%

**Supplied as:** A 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

AMARA peptide (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the AMARA peptide (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. AMARA peptide (trifluoroacetate salt) is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml. AMARA peptide (trifluoroacetate salt) is slightly soluble in dimethyl formamide.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of AMARA peptide (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of AMARA peptide (trifluoroacetate salt) in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

AMARA peptide is a synthetic peptide substrate for AMP-activated protein kinase (AMPK).<sup>1</sup> It contains a serine at position seven that is subject to phosphorylation by AMPK and has been used to monitor AMPK activity *in vitro* and *in vivo*.<sup>1,2</sup>

### References

1. Dale, S., Wilson, W.A., Edelman, A.M., *et al.* Similar substrate recognition motifs for mammalian AMP-activated protein kinase, higher plant HMG-CoA reductase kinase-A, yeast SNF1, and mammalian calmodulin-dependent protein kinase I. *FEBS Lett.* **361(2-3)**, 191-195 (1995).
2. Rybakowska, I.M., Slominska, E.M., Romaszko, P., *et al.* AMP-regulated protein kinase activity in the hearts of mice treated with low- or high-fat diet measured using novel LC-MS method. *Mol. Cell. Biochem.* **404(1-2)**, 5-10 (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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/21/2022

#### 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