

PRODUCT INFORMATION

AAF-CMK (trifluoroacetate salt)

Item No. 14461

CAS Registry No.: 184901-82-4

Formal Name: L-alanyl-N-[(1S)-3-chloro-2-oxo-1-(phenylmethyl)propyl]-L-alaninamide, mono(trifluoroacetate)

Synonyms: N-Ala-Ala-Phe-CMK, Tripeptidyl Peptidase Inhibitor II

MF: $C_{16}H_{22}ClN_3O_3 \cdot CF_3COOH$

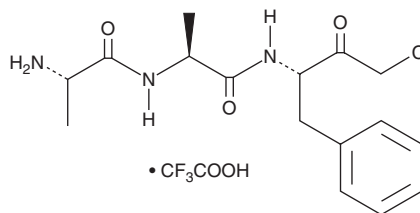
FW: 453.8

Purity: $\geq 95\%$

Supplied as: A crystalline solid

Storage: $-20^\circ C$

Stability: ≥ 4 years



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

Laboratory Procedures

AAF-CMK (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the AAF-CMK (trifluoroacetate salt) in the solvent of choice. AAF-CMK (trifluoroacetate salt) is soluble in water at a concentration of approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Tripeptidyl peptidase II (TPPII) is a serine peptidase of the subtilisin-type which removes tripeptides from the free NH2 terminus of oligopeptides.¹ AAF-CMK is an irreversible inhibitor of TPPII commonly used at 10-100 μM .²⁻⁴ It does not significantly interfere with the chymotrypsin-like activity of the proteasome. AAF-CMK also inhibits bleomycin hydrolase and puromycin-sensitive aminopeptidase when used at 50 μM .⁵

References

1. Macpherson, E., Tomkinson, B., Bälöw, R.-M., *et al.* Supramolecular structure of tripeptidyl peptidase II from human erythrocytes as studied by electron microscopy, and its correlation to enzyme activity. *Biochem. J.* **248**(1), 259-263 (1987).
2. Geier, E., Pfeifer, G., Wilm, M., *et al.* A giant protease with potential to substitute for some functions of the proteasome. *Science* **283**(5404), 978-981 (1999).
3. Hilbi, H., Puro, R.J., and Zychlinsky, A. Tripeptidyl peptidase II promotes maturation of caspase-1 in *Shigella flexneri*-induced macrophage apoptosis. *Infect. Immun.* **68**(10), 5502-5508 (2000).
4. Lévy, F., Burri, L., Morel, S., *et al.* The final n-terminal trimming of a subaminoterminal proline-containing HLA class I-restricted antigenic peptide in the cytosol is mediated by two peptidases. *J. Immunopharmacol.* **169**(8), 4161-4167 (2002).
5. Stoltze, L., Schirle, M., Schwarz, G., *et al.* Two new proteases in the MHC class I processing pathway. *Nat. Immunol.* **1**(5), 413-418 (2000).

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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