



# **Certificate of Analysis**

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Product Name: Ac-FLTD-CMK Catalog No.: 7242 Batch No.: 2

CAS Number: 2376255-48-8

# 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>26</sub>H<sub>37</sub>CIN<sub>4</sub>O<sub>8</sub>

Batch Molecular Weight: 569.05

Physical Appearance: White lyophilised solid

Counter Ion: TFA

**Solubility:** Soluble to 1 mg/ml in DMSO

Storage: Store at -20°C

Peptide Sequence: Ac-Phe-Leu-Thr-Asp-CMK

2. ANALYTICAL DATA

**HPLC:** Shows 97.4% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

<b>Amino</b>	Acid 1	<b>Theoretical</b>	Actual	<b>Amino</b>	Acid T	heoretica	l Actual
AIIIIIU	ACIU I	i lieuleticai	Actual	AIIIII	ACIU I	nevi enca	ı Actuai

Ala			Lys		
Arg			Met		
Asx			Phe	1.00	1.02
Cys			Pro		
Glx			Ser		
Gly			Thr	1.00	0.11
His			Trp		
lle			Tyr		
Leu	1.00	0.98	Val		

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



# **Product Information**

Print Date: Nov 11th 2024

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CAS Number: 2376255-48-8

#### **Description:**

Ac-FLTD-CMK is a potent and selective inhibitor of caspases 1, 5 and 4 (IC $_{50}$  values = 46.7 nM, 0.33  $\mu$ M, 1.49  $\mu$ M, respectively), and inhibits murine caspase-11 at 10  $\mu$ M. Ac-FLTD-CMK inhibits cleavage of gasdermin D by caspases, suppresses pyroptosis and reduces IL-1 $\beta$  release in macrophages.

### **Physical and Chemical Properties:**

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Physical Appearance: White lyophilised solid

#### **Peptide Sequence:**

Ac-Phe-Leu-Thr-Asp-CMK

Storage: Store at -20°C

# Solubility & Usage Info:

Soluble to 1 mg/ml in DMSO

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Counter Ion: TFA

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such Cys, Met,Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2  $\mu$ m filter to remove potential bacterial contamination whenever possible.

#### References:

Yang et al (2018) Mechanism of gasdermin D recognition by inflammatory caspases and their inhibition by a gasdermin D-derived peptide inhibitor. Proc.Natl.Acad.Sci.U.S.A. 115 6792. PMID: 29891674.

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