

Certificate of Analysis

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Product Name: N-Formyl-Met-Leu-Phe

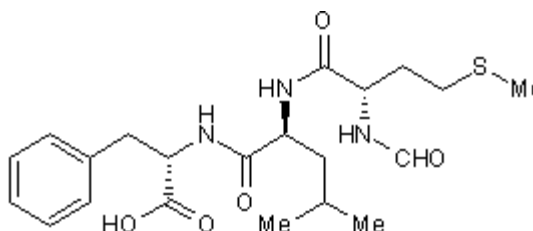
Catalog No.: 1921

Batch No.: 2

CAS Number: 59880-97-6

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₂₁ H ₃₁ N ₃ O ₅ S
Batch Molecular Weight:	437.55
Physical Appearance:	White lyophilised solid
Net Peptide Content:	100%
Counter Ion:	N/A
Solubility:	Soluble to 4.38 mg/ml in DMSO
Storage:	Desiccate at -20°C
Peptide Sequence:	



2. ANALYTICAL DATA

HPLC:	Shows 100% purity
Mass Spectrum:	Consistent with structure

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

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Description:

Endogenous chemotactic peptide and agonist for the formyl peptide receptor 1 (FPR1) ($K_i = 38$ nM). Stimulates aggregation of leukocytes.

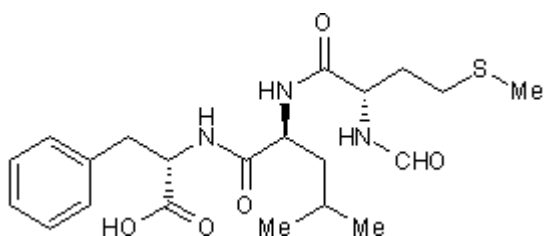
Physical and Chemical Properties:

Batch Molecular Formula: $C_{21}H_{31}N_3O_5S$

Batch Molecular Weight: 437.55

Physical Appearance: White lyophilised solid

Peptide Sequence:



Storage: Desiccate at $-20^{\circ}C$

Solubility & Usage Info:

Soluble to 4.38 mg/ml in DMSO

This product is supplied as a lyophilized solid and may 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.

Net Peptide Content: 100% (Remaining weight made up of counterions and residual water).

Counter Ion: N/A

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a $45-60^{\circ}C$ 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 as 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 $-20^{\circ}C$. 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:

Kreutzer et al (1978) Quantitative comparisons of various biological responses of neutrophils to different active and inactive chemotactic factors. *Immunopharmacology* **1** 39. PMID: 45788.

Spilberg et al (1984) Receptor blockade as a mechanism of deactivation of human neutrophils by pepstatin and formyl-Met-Leu-Phe. *Inflammation* **8** 73. PMID: 6325345.

Mills et al (2000) Characterization of the binding site on the formyl peptide receptor using three receptor mutants and analogs of Met-Leu-Phe and Met-Met-Trp-Leu-Leu. *J.Biol.Chem.* **275** 39012. PMID: 10960471.

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