

PRODUCT INFORMATION



Hemopressin

Item No. 10011038

Overview and Properties

Contents: This vial contains 1 mg of peptide.
Peptide Sequence: Rat hemopressin PVNFKFLSH
Molecular Weight: 1,088 kDa
Storage: -20°C (as supplied)
Stability: ≥3 years

Laboratory Procedures

This peptide is sparingly soluble in water and the following resuspension technique is recommended. Bring the peptide to room temperature and empty the contents of the vial into a 25 ml graduated cylinder. Use 1 ml serial aliquots of sterile filtered water to dissolve any remaining peptide in the glass vial to quantitatively transfer the total amount to the cylinder. Finally, add sterile filtered water to 20 ml final volume and mix gently to dissolve fully. One milligram of hemopressin dissolved in 20 ml water provides a 45.9 μM solution. One milligram per milliliter concentrations of hemopressin may also be prepared with the use of 10% methanol in water containing 0.1% trifluoroacetic acid.

Description

Rat hemopressin is a bioactive peptide fragment derived from the hemoglobin α1 chain. Hemopressin exhibits potent vasoactive biological activity, reducing rat blood pressure over a dosage range of 0.1-10 μg/kg.¹ This peptide is also a potent central cannabinoid (CB₁) receptor antagonist conferring analgesia and pain relief or antinociception *in vivo*.² Further studies will clarify the cellular and physiological effects of hemopressin, as well the possible products of endopeptidase activity on hemopressin.^{1,2}

References

1. Rioli, V., Gozzo, F.C., Heimann, A.S., *et al.* Novel natural peptide substrates for endopeptidase 24.15, neurolysin, and angiotensin-converting enzyme. *J. Biol. Chem.* **278(10)**, 8547-8555 (2003).
2. Heimann, A.S., Gomes, I., Dale, C.S., *et al.* Hemopressin is an inverse agonist of CB₁ cannabinoid receptors. *Proc. Natl. Acad. Sci. USA* **104(51)**, 20588-20593 (2007).

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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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