



# **Certificate of Analysis**

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Product Name: VIP (6-28) (human, rat, porcine, bovine) Catalog No.: 1905 Batch No.: 8

CAS Number: 69698-54-0

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>126</sub>H<sub>207</sub>N<sub>37</sub>O<sub>34</sub>S

Batch Molecular Weight: 2816.31

Physical Appearance: White lyophilised solid

Net Peptide Content: 75%
Counter Ion: TFA

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

**Storage:** Desiccate at -20°C

Peptide Sequence: Phe-Thr-Asp-Asn-Tyr-Thr-Arg-Leu-Arg-Lys-

GIn-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-

Ile-Leu-Asn-NH2

2. ANALYTICAL DATA

**HPLC:** Shows 96% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala	1.00	1.05	Lys	3.00	2.92
Arg	2.00	1.93	Met	1.00	0.98
Asx	4.00	3.70	Phe	1.00	1.04
Cys			Pro		
Glx	1.00	0.87	Ser	1.00	0.98
Gly			Thr	2.00	1.87
His			Trp		
lle	1.00	1.05	Tyr	2.00	2.08
Leu	3.00	3.10	Val	1.00	1.01

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



# **Product Information**

Print Date: Jul 1st 2021

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CAS Number: 69698-54-0

#### **Description:**

VIP (6-28) (human, rat, porcine, bovine) is a VIP receptor antagonist.

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

Batch Molecular Formula: C<sub>126</sub>H<sub>207</sub>N<sub>37</sub>O<sub>34</sub>S Batch Molecular Weight: 2816.31

Physical Appearance: White lyophilised solid

#### **Peptide Sequence:**

Phe-Thr-Asp-Asn-Tyr-Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-Ile-Leu-Asn-NH<sub>2</sub> Storage: Desiccate at -20°C

### Solubility & Usage Info:

Soluble to 1 mg/ml in water

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:** 75% (Remaining weight made up of counterions and residual water).

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:

Marko (2002) An evaluation of the efficacy of vasoactive intestinal polypeptide antagonists in vivo in the anaesthetized dog. Pharmacology 66 206. PMID: 12393943.

**Mohney and Zigmond** (1998) Vasoactive intestinal peptide enhances its own expression in sympathetic neurons after injury. J.Neurosci. **18** 5285. PMID: 9651211.

**Fishbein** et al (1994) A chimeric VIP-PACAP analogue but not VIP pseudopeptides function as VIP receptor antagonists. Peptides **15** 95. PMID: 7912431.

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