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## Product Information

### **BRADYKININ ACETATE** **Sigma Prod. No. B3259**

**CAS NUMBER:** 5979-11-3

#### **PHYSICAL PROPERTIES**

Appearance: White Powder

Molecular Structure: Arg-Pro-Pro-Gly-Phe-Ser-Pro-Phe-Arg (Acetate Salt)

Molecular Formula:  $C_{50}H_{73}N_{15}O_{11}$  (free base)

Molecular Weight: 1060.2 for anhydrous free base, acetate content is variable

#### **METHOD OF PREPARATION:**

This product is synthetic. It is made by solid phase peptide synthesis.

#### **STABILITY/ STORAGE AS SUPPLIED:**

Store desiccated below 0°C. Under these conditions it should have an expected shelf life of at least two years.

#### **SOLUBILITY/ SOLUTION STABILITY:**

Sigma routinely tests the solubility of the Bradykinin Acetate at 25 mg per ml in 0.1M Acetic Acid yielding a clear, colorless solution. Solutions can be stored in aliquots at -20°C for at least two months. A 1 mg/ml solution in water was stored at room temperature for 6 days and the purity decreased about 7 percent as determined by HPLC.

#### **USAGE/ APPLICATIONS:**

Bradykinin is believed to play an important role in the regulation of fluid and electrolyte balance, smooth muscle contraction, vasodilation and capillary permeability.<sup>1</sup>

Bradykinin, a pro-inflammatory peptide acting through G-protein-coupled receptors, activates sphingolipid metabolism.<sup>1</sup>

Bradykinin stimulates calcium mobilization in cells leading to direct inhibition of adenylylcyclase.<sup>3</sup>

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**REFERENCES:**

1. Kato, H. and Suzuki, T., *Biochemistry*, Vol. 10, 972-980 (1971).
2. Meacci, E. et al., *Biochemical and Biophysical Research Communications*, 221, 1-7 (1996).
3. Boyajian, C. Garritsen, A. and Cooper, D., *Journal of Biological Chemistry*, 266, 4995-5003 (1991).

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