Product Data Sheet

Product Name: Bradykinin 1-7 (Bradykinin Fragment 1-7)
Cat. No.: GC32601

Chemical Properties

Cas. No.	23815-87-4		
SMILES	Arg-Pro-Pro-Gly-Phe-Ser-Pro		
Formula	$C_{35}H_{52}N_{10}O_9$	M.Wt	756.85
Solubility	H_2O : 100 mg/mL (132.13 mM; Need ultrasonic)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Bradykinin (1-7) is an amino-truncated Bradykinin peptide. Bradykinin (1-7) is a metabolite of Bradykinin, cleaved by endopeptidase.

The Bradykinin peptide system is a tissue-based system with potent cardiovascular and renal effects. To investigate the regulation of this system, a highly sensitive amino terminal-directed radioimmunoassay that, with high performance liquid chromatography, enables the measurement of Bradykinin-(1-7), Bradykinin-(1-8), and Bradykinin-(1-9), is developed. Together with a carboxy terminal-directed radioimmunoassay, Bradykinin peptides in rat kidney and blood are characterized. The predominant Bradykinin peptides in kidney are Bradykinin-(1-9) (~100 fmol/g wet weight of tissue) and Bradykinin-(1-7) (~70 fmol/g), with low levels of Bradykinin-(1-8) (~8 fmol/g) and Bradykinin-(4-9) (~12 fmol/g) detectable; Bradykinin-(2-9) and Bradykinin-(3-9) are below the limits of detection. In blood, the levels of Bradykinin-(1-9) are very low (~2 fmol/ml), and other Bradykinin peptides are below the limits ofdetection. Administration of the angiotensin converting enzyme (ACE) inhibitor Perindopril is associated with an approximate twofold increase in renal levels of Bradykinin-(1-8) and Bradykinin-(1-9) and a decrease in the Bradykinin-(1-7)/Bradykinin-

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

(1-9) ratio. The amino terminal-directed radioimmunoassay is also applied to heart, aorta, brown adipose tissue, adrenal, lung, and brain. For these tissues, Bradykinin-(1-7) and Bradykinin-(1-9) are of similar abundance (16-340 fmol/g), with lower levels of Bradykinin-(1-8)[1].

[1]. Campbell DJ, et al. Bradykinin peptides in kidney, blood, and other tissues of the rat. Hypertension. 1993 Feb;21(2):155-65.