

Analytical Data

Code: 4361-v

Compound: [Pyr¹]-Apelin-13 (Human)

Pyr-Arg-Pro-Arg-Leu-Ser-His-Lys-Gly-Pro-Met-Pro-Phe

(M. W. 1533.80) C₆₉H₁₀₈N₂₂O₁₆S₁

Appearance : White amorphous powder

*** Specific Optical Rotation**

$[\alpha]_D^{20}$ -127° (c* 0.28, H₂O)

* c value was calculated from the net peptide weight.

*** Elemental Analysis**

Found C, 48.98 ; H, 7.35 ; N, 16.72 %

*** Amino Acid Analysis**

Acid Hydrolysis: 6N HCl, 110°C, 22h.

Ser (1)0.89 Glu (1)1.01 Pro (3)3.02 Gly (1)0.96

Met (1)0.99 Leu (1)1.01 Phe (1)1.00 His (1)1.00

Lys (1)1.01 Arg (2)2.01

Thin Layer Chromatography : A trace of sulfoxide derivative is detected.

Cellulose Layer

Application : 50 μg

Solvent System : n-BuOH:AcOH:H₂O:pyridine=15:3:12:10
n-BuOH:AcOH:H₂O=4:1:5 (upper phase)

Located by ninhydrin and Pauly reagent

Mass Spectral Analysis : Exhibits correct MW

Sample : 4361-v [Pyr1]-Apelin-13 (Human)
Sample Size : 0.4 μ L (0.5 mg/ 50 μ L-1% AcOH)
Column : YMC Pack ODS-A S-3 μ m (4.6 mm I.D. \times 150 mm) #0415227716(W) + G(4 \times 10mm)
Eluent : 0.1M NaCl (pH 2.4)
Gradient : Acetonitrile 10% to 60% [25 min.]
Flow Rate : 1.0 mL/min. , ; Press. : 169 kg/cm² , ; Temp. : 25 $^{\circ}$ C
Detection : CH.1 210 nm

