

Analytical Data

Code: 4334

Compound: Endomorphin-2
Tyr-Pro-Phe-Phe-NH₂

(M. W. 571.67) C₃₂H₃₇N₅O₅

Appearance : White amorphous powder

Specific Optical Rotation

$[\alpha]_D^{25}$ -31.5 ° (c* 0.46, 50% AcOH)

* c value was calculated from the net peptide weight.

Elemental Analysis

Found C, 63.57 ; H, 6.86 ; N, 10.63 %

Amino Acid Analysis

Acid Hydrolysis: 6N HCl, 110°C, 22h.

Pro (1)1.00 Tyr (1)0.97 Phe (2)2.00

NH₃ (1)0.98

Thin Layer Chromatography : Single spot

Silica Gel Layer

Application : 50 μg

Solvent System : CHCl₃ : MeOH : AcOH : H₂O = 65 : 40 : 1 : 10
n-BuOH : AcOH : H₂O = 4 : 1 : 5 (upper phase)

Located by ninhydrin and Pauly reagent

Mass Spectral Analysis : Exhibits correct MW

Sample : 4334-v Endomorphin-2
Sample Size : 0.2 μ L (1.10 mg/ 110 μ L- 20% 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. : 172 kg/cm² , ; Temp. : 25 $^{\circ}$ C
Detection : CH.1 210 nm

