

Analytical Data

Code: 4208-v

Compound: Big Endothelin-1 (Human, 1-38)

Cys-Ser-Cys-Ser-Ser-Leu-Met-Asp-Lys-Glu-Cys-Val-Tyr-
Phe-Cys-His-Leu-Asp-Ile-Ile-Trp-Val-Asn-Thr-Pro-Glu-
His-Val-Val-Pro-Tyr-Gly-Leu-Gly-Ser-Pro-Arg-Ser

(M. W. 4282.87) C₁₈₉ H₂₈₂ N₄₈ O₅₆ S₅

Appearance : White amorphous powder

*** Specific Optical Rotation**

$[\alpha]_D^{25}$ -117.9° (c 0.41, 1% AcOH)

*** Amino Acid Analysis**

Acid Hydrolysis: 6N HCl with thioglycolic acid, 110 °C, 22h.

Asp (3) 3.06	Thr (1) 0.95	Ser (5) 4.23	Glu (2) 2.00
Pro (3) 2.98	Gly (2) 1.91	Cys (4) 3.57	Val (4) 3.29*
Met (1) 0.96	Ile (2) 1.08*	Leu (3) 2.98	Tyr (2) 1.97
Phe (1) 1.02	His (2) 1.92	Lys (1) 0.98	Arg (1) 0.97
NH ₃ (1) 1.97	Trp (1) 0.64		

* resistance of the Ile-Ile and Val-Val bonds to acid hydrolysis

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 : 4208-v Big Endothelin-1 (Human, 1-38)
Sample Size : 0.4 μ L (0.53 mg/ 53 μ L- 1%AcOH)
Column : YMC Pack ODS-A (4.6 mm I.D. \times 150 mm) #0415227716 + G(4 \times 10 mm)
Eluent : 0.1M NaCl (pH 2.4)
Gradient : Acetonitrile 20% to 60% [25 min.]
Flow Rate : 1.0 mL/min. , ; Press. : 174 kg/cm² , ; Temp. : 25°C
Detection : CH.1 210 nm

