

Analytical Data

Code: 4298-v

Compound: Midkine(Human)

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

[Disulfide Bonds: 15-39, 23-48, 30-52, 62-94, 72-104]

(M. W. 13240.10)

C₅₇₀ H₉₁₅ N₁₇₇ O₁₆₇ S₁₀

Appearance : White amorphous powder

*** Specific Optical Rotation**

$[\alpha]_D^{20}$ -34.0 ° (c 0.12, H₂O)

*** Amino Acid Analysis**

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

Asp (8)7.54	Thr (10)9.63	Ser (3)2.80	Glu (11)11.0
Pro (6)6.14	Gly (16)16.3	Ala (10)10.2	1/2Cystine(10)8.64
Val (5)5.05	Ile (2)1.97	Leu (1)1.02	Tyr (2)1.97
Phe (3)3.05	Lys (23)23.1	NH ₃ (8)12.2	Trp (4)2.90*
Arg (7)7.07			

Mass Spectral Analysis : Exhibits correct MW

Sample : 4298-v Midkine (Human)
Sample Size : 10 μ L (56 μ g/ 56 μ L- H₂O)
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 10% to 60% [25 min.]
Flow Rate : 1.0 mL/min. , ; Press. : 130 kg/cm², ; Temp. : 40°C
Detection : CH.1 210 nm

