Product Data Sheet

Gramicidin S

Cat. No.: HY-P5712 CAS No.: 113-73-5 Molecular Formula: $C_{60}H_{92}N_{12}O_{10}$ Molecular Weight: 1141.45

Sequence: cyclo(Val-Orn-Leu-D-Phe-Pro)2

Sequence Shortening: cyclo(VOLDFP)2

Target: Antibiotic; Bacterial

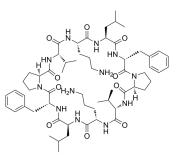
Pathway: Anti-infection

Storage: Sealed storage, away from moisture and light

Powder -80°C 2 years -20°C 1 year

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (87.61 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	0.8761 mL	4.3804 mL	8.7608 mL
	5 mM	0.1752 mL	0.8761 mL	1.7522 mL
	10 mM	0.0876 mL	0.4380 mL	0.8761 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Gramicidin S (Gramicidin soviet) is a cationic cyclic peptide antibiotic. Gramicidin S is active against Gram-negative and Gram-positive bacteria by perturbing integrity of the bacterial membranes. Gramicidin S also inhibits cytochrome bd quinol oxidase^[1].

REFERENCES

[1]. Mogi T, et al. Gramicidin S and polymyxins: the revival of cationic cyclic peptide antibiotics. Cell Mol Life Sci. 2009 Dec;66(23):3821-6.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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