

Duramycin

Cat. No.:	HY-106302		
CAS No.:	1391-36-2		
Molecular Formula:	C ₈₉ H ₁₂₅ N ₂₃ O ₂₅ S ₃		
Molecular Weight:	2013.28		
Sequence:	Cys-Lys-Gln-Cys-Cys-Ala-Phe-Gly-Pro-Phe-{Abu}-Phe-Val-Cys-Asp-Gly-Asn-{Abu}-Lys-NH ₂ (Disulfide bridge: Cys1-Abu18, Cys4-Cys14, Cys5-Abu11)		
Sequence Shortening:	CKQCCAFGPF-{Abu}-FVCDGN-{Abu}-K-NH ₂ (Disulfide bridge: Cys1-Abu18, Cys4-Cys14, Cys5-Abu11)		
Target:	Bacterial		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month

CKQCCAFGPF-{Abu}-FVCDGN-{Abu}-K-NH₂ (Disulfide bridge: Cys1-Abu18, Cys4-Cys14, Cys5-Abu11)

SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 0.5 mg/mL (0.25 mM; Need ultrasonic)
-----------------	---

BIOLOGICAL ACTIVITY

Description	Duramycin (Moli1901) is a lantibiotic derived from <i>Streptomyces cinnamoneuma</i> . Duramycin also is a antimicrobial peptide. Duramycin can be used for the research of cystic fibrosis (CF) ^{[1][2]} .
In Vivo	<p>Evaluation of [⁶⁸Ga]NODAGA-Duramycin as a positron emission tomography (PET) tracer of cell death for whole-body detection of chemotherapy-induced organ toxicity. Organ uptake is analyzed in untreated and doxorubicin, busulfan, and cisplatin-treated mice 2 h after intravenous injection of [⁶⁸Ga]NODAGA-Duramycin. [⁶⁸Ga]NODAGA-Duramycin PET/CT is successfully applied to non-invasively detect chemotherapy-induced organ toxicity with high sensitivity in mice^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

- [1]. Oliynyk I, et al. Effect of duramycin on chloride transport and intracellular calcium concentration in cystic fibrosis and non-cystic fibrosis epithelia. *APMIS*. 2010 Dec;118(12):982-90.
- [2]. Huo L, et al. Insights into the Biosynthesis of Duramycin. *Appl Environ Microbiol*. 2017 Jan 17;83(3). pii: e02698-16.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA