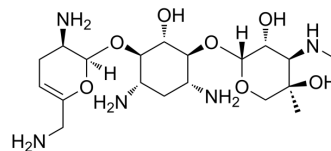


Sisomicin

Cat. No.:	HY-B1222A
CAS No.:	32385-11-8
Molecular Formula:	C ₁₉ H ₃₇ N ₅ O ₇
Molecular Weight:	447.53
Target:	Antibiotic; Bacterial; Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Sisomicin is a broad-spectrum aminoglycoside antibiotic produced by <i>Micromonospora inyoensis</i> . Sisomicin is highly active against Gram-positive bacteria ^{[1][2]} .
In Vitro	Sisomicin (6.25 µg/mL) completely inhibits the growth of various clinical isolates bacterial, such as <i>Klebsiella</i> , <i>Salmonella</i> , <i>Citrobacter</i> , and <i>Staphylococcus aureus</i> ^[1] . Sisomicin (20 µg/mL; 30 min) has insignificant impairment on polymorphonuclear neutrophil (PMN) ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Sisomicin (4 mg/kg; ip; single dose) appears to accumulate and persist in the kidneys, showing potential renal toxicity in rats ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- ACS Biomater Sci Eng. 2024 Apr 24.
- ACS Infect Dis. 2024 Apr 12;10(4):1327-1338.
- Curr Microbiol. 2021 Dec 14;79(1):12.
- Research Square Preprint. 2024 Apr 1.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Crowe CC, et al. Sisomicin: evaluation in vitro and comparison with gentamicin and tobramycin. *Antimicrob Agents Chemother*. 1973 Jan;3(1):24-8.
- [2]. P Noone, et al. Sisomicin, netilmicin and dibekacin. A review of their antibacterial activity and therapeutic use. *Drugs*. 1984 Jun;27(6):548-78.
- [3]. Le Moli S, et al. In vitro and in vivo effect of sisomicin and gentamycin on polymorphonuclear chemotaxis and phagocytosis. *Int J Immunopharmacol*. 1983;5(1):49-54.

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