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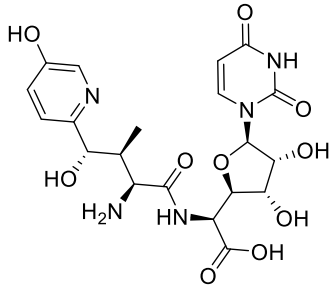
PRODUCT DATA SHEET

Nikkomycin Z

Code No.: **BIA-N2466**

Pack sizes: **0.1 mg, 0.5 mg**



Synonyms : Neopolyoxin C, 5-[[(2S,3S,4S)-2-Amino-4-hydroxy-4-(5-hydroxy-2-pyridinyl)-3-methyl-1-oxobutyl]amino]-1,5-dideoxy-1-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-β-D-allofuranuronic acid

Specifications

CAS #	:	**59456-70-1**
Molecular Formula	:	**$C_{20}H_{25}N_5O_{10}$**
Molecular Weight	:	**495.44**
Source	:	***Streptomyces tendae***
Appearance	:	**White solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol or DMSO**

Application Notes

Nikkomycin Z is a nucleoside-type antibiotic isolated from Steptomyces tendae. Nikkomycin Z has potent narrow spectrum activity against some fungi, including Rhizopus cirdinans, Colletrotrichum trifolii and Botrytis cinerea (MIC 1, 5 and 5 µg/mL) and Coccidioides species, entering clinical development for the treatment of coccidioidomycosis. Nikkomycin Z inhibits chitin synthesis. Nikkomycin Z in combination with caspofungin or micafungin is synergistic against Candida albicans and Candida parapsilosis biofilms. Nikkomycin A is active against Histoplasma capsulatum in vitro and in vivo.

References

1. Stoffwechselprodukte von mikroorganismen 154. Mitteilung. Nikkomycin, ein neuer hemmstoff der chitinsynthese bei pilzen. Dahn U. et al. Arch. Microbiol. 1976, 107, 143.
2. In vitro antifungal activity on nikkomycin Z in combination with fluconazole or itraconazole. Li R.K. & Rinaldi M.G. Antimicrob Agents Chemother. 1999, 43, 1401.
3. Synergistic effect of nikkomycin Z with caspofungin and micafungin against Candida albicans and Candida parapsilosis biofilms. Kovacs R. et al. Lett Appl Microbiol. 2019, 69, 271.
4. Comparison of nikkomycin Z with amphotericin B and itraconazole for treatment of histoplasmosis in a murine model. Goldberg J. et al. Antimicrob Agents Chemother. 2000, 44, 1624.

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