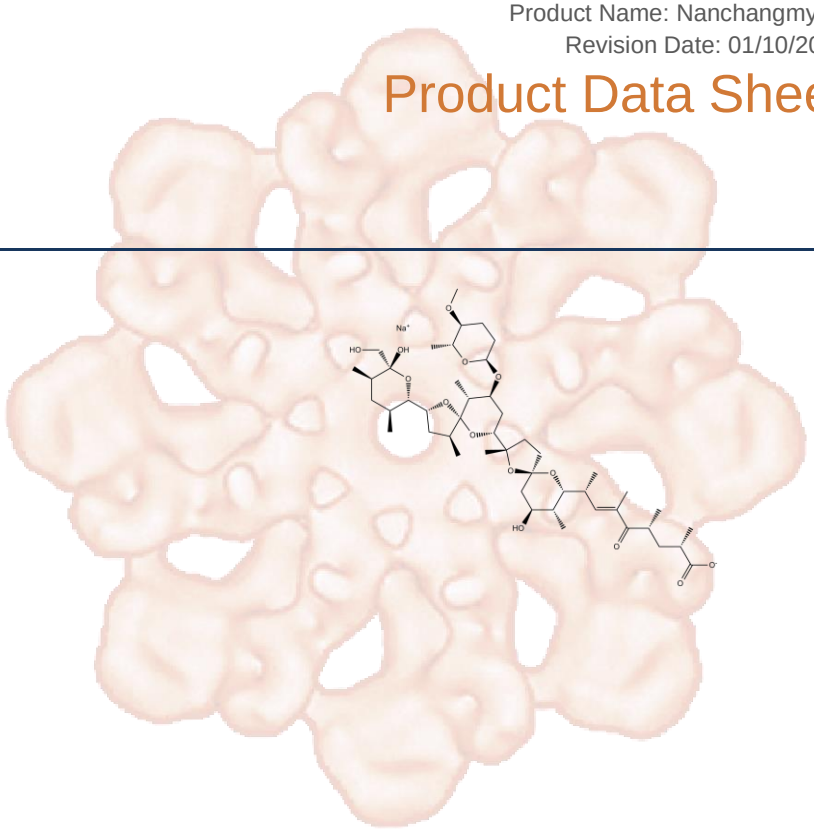
Product Data Sheet

Nanchangmycin



Cat. No.: B2161
CAS No.: 65101-87-3
Formula: C48H80O13
M.Wt: 889.1
Synonyms:
Target:
Pathway:
Storage: Store at -20°C

Solvent & Solubility

In Vitro

Soluble in DMSO

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1mg	5mg	10mg
1 mM	1.1247 mL	5.6237 mL	11.2473 mL
5 mM	0.2249 mL	1.1247 mL	2.2495 mL
10 mM	0.1125 mL	0.5624 mL	1.1247 mL

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

Biological Activity

Shortsummary	Polyether antibiotic
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	U2OS cells, Vero cells
Preparation method:	The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	2 μM
Applications:	Nanchangmycin was modestly toxic but very efficacious in inhibiting viral

		infection. Nanchangmycin blocked ZIKV infection with low toxicity in the sub-micromolar range. Nanchangmycin potently blocked ZIKV infection across cell types. The IC50 values for infection were between 0.1 and 0.4 μM. Nanchangmycin inhibited DENV across cell types. In Vero cells, treatment with nanchangmycin reduced viral titers by 4-log. Nanchangmycin blocked an early step in the viral life cycle. In U2OS cells, treatment with nanchangmycin (2 μM) blocked infection by an additional flavivirus (WNV, Kunjin) or alphaviruses (CHIKV, 181/25; SINV, HRsp). In HBMECs, nanchangmycin effectively blocked ZIKV infection in HUVECs and UtMECs. Nanchangmycin potently inhibited ZIKV infection in primary placental fibroblast cells.
In Vivo	**Animal experiment**	
	Applications:	
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Rausch K, Hackett B A, Weinbren N L, et al. Screening bioactives reveals nanchangmycin as a broad spectrum antiviral active against Zika virus[J]. Cell reports, 2017, 18(3): 804-815.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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