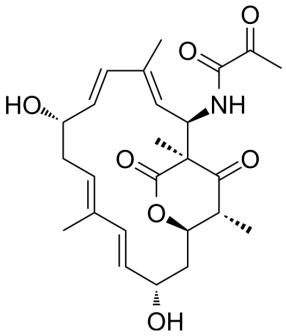
Lankacidin C

Cat. No.:	HY-121412
CAS No.:	23623-31-6
Molecular Formula:	$C_{25}H_{33}NO_7$
Molecular Weight:	459.53
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Lankacidin C is an inhibitor of protein synthesis in vitro. Lankacidin C inhibits the activity of L1210 leukemia, B16 melanoma and 6C3 HED/OG lymphosarcoma cell lines. Lankacidin C has antibacterial activity and antitumor activity[1][2].

In Vivo

Lankacidin C (75-1000 mg/kg; i.p.; once daily for 5 d) prolongs the mean survival time of (C57BL/6×DBA/2) F1 (BDF1) mice with dose-dependent manner. Lankacidin C (1000 mg/kg) significantly inhibits the growth of B-16 melanoma in C57BL/6 mice implanted B-16 melanoma[2].

Lankacidin C (300 mg/kg; i.p.; once daily for 6 d) inhibits the activity of L-1210 cells that resistance to 6-Mercaptopurine (HY-13677) or Cytosine Arabinoside (HY-13605) in BDF1 mice bearing L-1210/6-Mercaptopurine or L-1210/Cytosine Arabinoside[2].

Lankacidin C (10-100 mg/kg; i.p.; once daily for 5 d) significantly prolongs the mean survival time of C3H/He mice bearing 6C3HED/OG or 6C3HED/RG lymphosarcoma[2].

Lankacidin C (500 mg/kg; i.p.; once daily for 3 or 4 d) suppresses the production of antibody against sheep erythrocytes in ICR mice when administered before or after antigenic stimulation[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	C57BL/6, C3H/He, ICR and (C57BL/6×DBA/2) F1 (BDF1) mice[2].
Dosage:	10, 20, 25, 30, 40, 50, 100, 150, 250, 300, 500, 600 or 1000 mg/kg
Administration:	Intraperitoneal injection; once daily for 3, 4, 5 or 6 days
Result:	Inhibited the growth of L1210 leukemia, B16 melanoma and 6C3 HED/OG or 6C3 HED/RG lymphosarcoma cells.

REFERENCES

[1]. Cai L, et al. Modular Approaches to Lankacidin Antibiotics. J Am Chem Soc. 2020 Sep 2;142(35):15116-15126.

[2]. Ootsu K, et al. Effects of Lankacidin group (T2636) antibiotics on the tumor growth and immune response against sheep erythrocytes in mice. Gan. 1973 Oct;64(5):481-92.

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

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