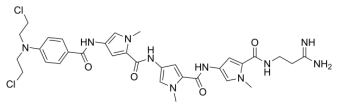
Tallimustine

Cat. No.:	HY-105270
CAS No.:	115308-98-0
Molecular Formula:	$C_{32}H_{38}Cl_2N_{10}O_4$
Molecular Weight:	697.61
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Tallimustine (FCE 24517), a distamycin-A derivative, is an anticancer agent[1][2][4].

In Vitro

Tallimustine (0.1-10 μM, 4 h) induces damage to purified SV40 DNA[1].
Tallimustine (72 h) shows cytotoxicity in CEM Cells, with an IC_{50} of 3.5 nM[1].
Tallimustine (25 and 100 nM, 6 days) induces erythroid differentiation of K562 cells[2].
Tallimustine (100 nM, 6 days) increases accumulation of γ-globin mRNA in K562 cells[2].
Tallimustine (0.5 μg/mL, 1 h) arrests SW626 cells in G2/M phase[3].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[2]

Cell Line:	K562 cells
Concentration:	25 and 100 nM
Incubation Time:	4 days
Result:	Inhibited cell proliferation.

In Vivo

Tallimustine (3 mg/kg, i.p.) shows antileukaemic activity in L1210 tumor bearing mice[4].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	L1210 tumor bearing mice[2].
Dosage:	3 mg/kg
Administration:	Intraperitoneal injection (i.p.)
Result:	Prolonged the survival of mice.

REFERENCES

[1]. Herzig MC, et al. Tallimustine lesions in cellular DNA are AT sequence-specific but not region-specific. Biochemistry. 1999 Oct 19;38(42):14045-55.

[2]. Bianchi N, et al. Accumulation of gamma-globin mRNA and induction of erythroid differentiation after treatment of human leukaemic K562 cells with tallimustine. Br J Haematol. 2001 Jun;113(4):951-61.

[3]. Erba E, et al. Comparison of cell-cycle phase perturbations induced by the DNA-minor-groove alkylator tallimustine and by melphalan in the SW626 cell line. Int J Cancer. 1995 Jul 17;62(2):170-5.

[4]. Tagliabue G, et al. Combination of the new minor groove alkylator tallimustine and melphalan. Eur J Cancer. 1997 Feb;33(2):284-7.

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