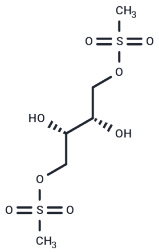
Data Sheet (Cat.No.T17159)

TargetMol

Treosulfan

Chemical Properties



CAS No. : 299-75-2

Formula: C6H14O8S2

Molecular Weight: 278.3

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Treosulfan (NSC 39069) is a bifunctional alkylating agent used in the treatment of advanced ovarian cancer.[2]
Targets(IC50)	DNA Alkylation,DNA Alkylator/Crosslinker
In vitro	**METHODS**: ES cell lines A4573, CHP-100, JR (NCI-EWS 94), RD-ES, SK-N-MC, TC32, and TC71 were treated with Treosulfan (NSC 39069)(1, 10, 100, 1000 μM), and cell viability was measured by MTT assay. **RESULTS** The IC50 values of A4573, CHP-100, JR (NCI-EWS 94), RD-ES, SK-N-MC, TC32, and TC71 were (35, 70, 100, 250, 75, 5, 50, 10 μM). [1]
In vivo	**METHODS**: NOD/SCID mice were injected with ES sarcoma cell line TC71 or CHP-100 in the left gastrocnemius muscle. When tumors were palpable, mice were injected with Treosulfan (NSC 39069) (3,000 mg/kg, i.p), busulfan (60 mg/kg, i.p), or vehicle (PBS/20% DMSO, i.p). **RESULTS** Treosulfan significantly inhibited tumor growth in both cell lines, whereas busulfan only caused an initial inhibition of tumor growth in the cell line TC71 and caused tumor growth in mice injected with the cell line CHP-100 on day 13 Moderately suppressed. [1]

Solubility Information

Solubility	DMSO: 100 mg/mL (359.32 mM),Sonication is recommended. H2O: 50 mg/mL (179.66 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (14.37 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.5932 mL	17.9662 mL	35.9324 mL
5 mM	0.7186 mL	3.5932 mL	7.1865 mL
10 mM	0.3593 mL	1.7966 mL	3.5932 mL
50 mM	0.0719 mL	0.3593 mL	0.7186 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Werner S, et al. Preclinical studies of treosulfan demonstrate potent activity in Ewing's sarcoma. Cancer Chemother Pharmacol. 2008 Jun;62(1):19-31.
Fichtner I, et al. Antileukaemic activity of treosulfan in xenografted human acute lymphoblastic leukaemias (ALL). Eur J Cancer. 2003 Apr;39(6):801-7.
Sjöö F, et al. Myeloablative and immunosuppressive properties of treosulfan in mice. Exp Hematol. 2006 Jan;34(1):115-21.