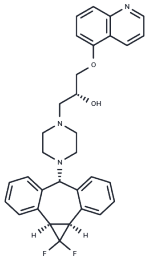
Data Sheet (Cat.No.T6018L)

TargetMol

Zosuquidar

Chemical Properties



CAS No. : 167354-41-8

Formula: C32H31F2N3O2

Molecular Weight: 527.6

Storage: Store at low temperature
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	Zosuquidar (RS 33295-198) is a potent P-glycoprotein inhibitor with antitumor activity, inhibits tumor growth, significantly inhibits PD-L1 expression by triggering its autophagic degradation, and is used in the study of acute myeloid leukemia.
Targets(IC50)	P-gp
In vitro	Zosuquidar (0.3 μM, treated for 48 hours) enhances the cytotoxic effect of DNR (P-glycoprotein substrate) in P-glycoprotein-active cell lines. [2] Zosuquidar (5-16 μM, treated for 72 hours) alone exhibited strong cytotoxicity in drug-sensitive cell lines and multidrug resistant (MDR) cell lines. [1]
In vivo	Intraperitoneal injection of 30, 10, 3, or 1 mg/kg Zosuquidar once daily for 5 days significantly prolonged subject survival. [1] Intraperitoneal injection of 30 mg/kg Zosuquidar once daily for 5 days observed a significant potentiation when combined with adriamycin (Doxorubicin). [1]

Solubility Information

Solubility	DMSO: 150 mg/mL (284.31 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (18.95 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (18.95 mM),Solution. *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	1.8954 mL	9.4769 mL	18.9538 mL
5 mM	0.3791 mL	1.8954 mL	3.7908 mL
10 mM	0.1895 mL	0.9477 mL	1.8954 mL
50 mM	0.0379 mL	0.1895 mL	0.3791 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

Dantzig AH, et al. Reversal of P-glycoprotein-mediated multidrug resistance by a potent cyclopropyldibenzosuberane modulator, LY335979. Cancer Res. 1996 Sep 15;56(18):4171-9.
Tang R, et al. Zosuquidar restores drug sensitivity in P-glycoprotein expressing acute myeloid leukemia (AML). BMC Cancer. 2008 Feb 13;8:51.
Cripe LD, et al. Zosuquidar, a novel modulator of P-glycoprotein, does not improve the outcome of older patients with newly diagnosed acute myeloid leukemia: a randomized, placebo-controlled trial of the Eastern Cooperative Oncology Group 3999. Blood. 2010 Nov 18;116(20):4077-85.