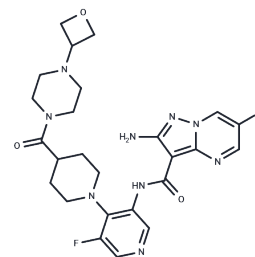


Gartisertib

Chemical Properties

CAS No. :	1613191-99-3
Formula:	C ₂₅ H ₂₉ F ₂ N ₉ O ₃
Molecular Weight:	541.55
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	Gartisertib (VX-803) is an orally active and selective Rad3-related protein (ATR) inhibitor with antitumor activity, inhibiting the antiproliferative effect induced in ccRCC cells, and inhibiting ATR-driven phosphorylation of checkpoint kinase 1 (Chk1), useful for studying solid tumors.
Targets(IC50)	ATM/ATR
In vitro	Gartisertib was four times more potent in all glioblastoma cell lines than the widely used ATR inhibitor berzosertib (Gartisertib median IC ₅₀ = 0.56 μM, berzosertib median IC ₅₀ = 2.21 μM). In addition, Gartisertib observed a higher IC ₅₀ (7.22 μM) in human astrocytes, indicating a lower potential toxicity of Gartisertib to normal brain cells. The combination of Gartisertib (1 μM) with TMZ+RT significantly increased apoptosis and cell death in patient-derived glioblastoma cell lines. [1]
In vivo	Gartisertib (10 mg/kg or 20 mg/kg) plus cisplatin inhibited tumor growth in metastatic clear cell renal cell carcinoma (ccRCC) xenografts, demonstrating therapeutic synergies. [2]

Solubility Information

Solubility	DMSO: 16 mg/mL (29.54 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 1.5 mg/mL (2.77 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8466 mL	9.2328 mL	18.4655 mL
5 mM	0.3693 mL	1.8466 mL	3.6931 mL
10 mM	0.1847 mL	0.9233 mL	1.8466 mL
50 mM	0.0369 mL	0.1847 mL	0.3693 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

Lozinski M, et al. ATR inhibition using gartisertib enhances cell death and synergises with temozolomide and radiation in patient-derived glioblastoma cell lines. *Oncotarget*. 2024 Jan 16;15:1-18.

Seidel P, et al. ATR represents a therapeutic vulnerability in clear cell renal cell carcinoma. *JCI Insight*. 2022 Dec 22; 7(24):e156087.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481