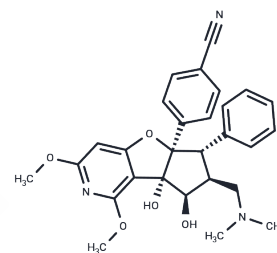


Zotatifin

Chemical Properties

CAS No. :	2098191-53-6
Formula:	C ₂₈ H ₂₉ N ₃ O ₅
Molecular Weight:	487.55
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	Zotatifin (eFT226) is a selective eIF4A inhibitor with antiviral and anticancer activities, blocking tumor growth driven by receptor tyrosine kinases and inhibiting Sox4 translation, inducing apoptosis.
Targets(IC50)	Apoptosis, Antiviral, PERK, SARS-CoV
In vitro	<p>Methods: Zotatifin (0.0001 μM-1 μM, 72 hours) was used to treat MDA-MB-231 cells, and the antiproliferative activity was determined.</p> <p>Results: Zotatifin showed potent antiproliferative activity in MDA-MB-231 tumor cells, with a GI50 value of less than 15 nM.</p> <p>TMD8 and Pfeiffer DLBCL tumor cells were treated with Zotatifin (30 μM-100 μM, 3 or 24 hours), and the changes in protein levels were detected by WB.</p> <p>Results: Zotatifin reduced the expression of MYC, CCND3, BCL2, and MCL1 proteins in a time- and dose-dependent manner.[1]</p>
In vivo	<p>Methods: Zotatifin (1 mg/kg, intravenous injection, 14-22 days) was used to treat mice bearing TMD8 xenografts, HBL1 xenografts, Pfeiffer xenografts, SU-DHL-6 xenografts, SU-DHL-10 xenografts, and Ramos xenografts, and the tumor inhibition rate was observed.</p> <p>Results: The tumor growth percentages of various tumor xenograft model mice after Zotatifin treatment were 97%, 87%, 70%, 83%, 37%, and 75%, respectively.</p> <p>Methods: Zotatifin (0.001 mg/kg-1 mg/kg, intravenous injection; 15 days) was used to treat mice bearing B-cell lymphoma xenograft models, and the tumor growth in vivo was observed.</p> <p>Results: Zotatifin inhibited the growth of B-cell lymphoma xenografts and was well tolerated in B-cell lymphoma xenograft models in vivo.[2]</p>

Solubility Information

Solubility	DMSO: 150 mg/mL (307.66 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: 5 mg/mL (10.26 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</i>

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In vivo Formulation	<i>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>
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0511 mL	10.2554 mL	20.5107 mL
5 mM	0.4102 mL	2.0511 mL	4.1021 mL
10 mM	0.2051 mL	1.0255 mL	2.0511 mL
50 mM	0.041 mL	0.2051 mL	0.4102 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

Peggy A. Thompson, et al. Preclinical Evaluation of eFT226, a Novel, Potent and Selective eIF4A Inhibitor with Anti-tumor Activity in B-cell Malignancies.

Gordon DE, et al. A SARS-CoV-2 protein interaction map reveals targets for drug repurposing. Nature. 2020 Apr 30.

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