

EC330

Chemical Properties

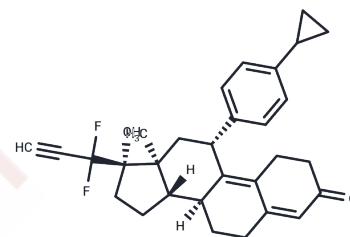
CAS No. : 2016795-77-8

Formula: C₃₀H₃₂F₂O₂

Molecular Weight: 462.57

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	EC330, a novel steroidal LIF inhibitor showed cytotoxicity in various cancer cell lines and NCI-60 cell line panel at low nano-molar range.
Targets(IC50)	Others, Interleukin
In vitro	EC330 blocked formation of colonies in soft agar and inhibited angiogenesis (tube formation) in human umbilical vein endothelial cells. EC330 binds to LIF/LIFR complex by insilico docking studies and reduced the STAT3 phosphorylation in a dose dependent manner through blocking LIF-JAK-STAT signaling. EC330 showed marked specificity in MCF-7 cells overexpressing LIF versus MCF-7 cells. The compound further showed cytoskeletal disruption and targeting cancer associated fibroblasts (CAFs).
In vivo	EC330 treatment (0.5 and 2.5mg/kg) dose dependently reduced tumor burden in ovarian (IGROV-1) and triple negative breast cancer (MDA-MB-231) cell xenografted mouse models.

Solubility Information

Solubility	DMSO: 20 mg/mL (43.24 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: 2 mg/mL (4.32 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	2.1618 mL	10.8092 mL	21.6183 mL
5 mM	0.4324 mL	2.1618 mL	4.3237 mL
10 mM	0.2162 mL	1.0809 mL	2.1618 mL
50 mM	0.0432 mL	0.2162 mL	0.4324 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

Nair H B , Santhamma B , Viswanadhapa S , et al. Abstract LB-208: First-in-class steroidal leukemia inhibitory factor (LIF) inhibitor in targeted cancer therapy[J]. Cancer Research, 2016, 76(14 Supplement):LB-208-LB-208.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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