

MST-312

Chemical Properties

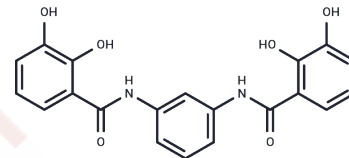
CAS No. : 368449-04-1

Formula: C₂₀H₁₆N₂O₆

Molecular Weight: 380.35

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	MST-312 (Telomerase Inhibitor IX) is a derivative of green tea epigallocatechin gallate (EGCG). MST-312 is a telomerase inhibitor. MST-312 has research value in cancer, such as multiple myeloma (MM).
Targets(IC50)	Telomerase
In vitro	In U-266 cells, MST-312 (2 µM) upregulates the pro-apoptotic gene Bax and down-regulates the anti-apoptotic gene Bcl-2 and suppresses the expression of c-Myc and hTERT genes. MST-312 (2-8 µM) reduces cellular viability in a dose dependent and time-dependent manner. MST-312 (2-8 µM) induces cell apoptosis in a dose-dependent manner[1].

Solubility Information

Solubility	H ₂ O: Insoluble DMSO: 250 mg/mL (657.29 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	2% DMSO+40% PEG300+5% Tween 80+ 53% Saline: 5 mg/mL (13.15 mM) <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	2.6292 mL	13.1458 mL	26.2916 mL
5 mM	0.5258 mL	2.6292 mL	5.2583 mL
10 mM	0.2629 mL	1.3146 mL	2.6292 mL
50 mM	0.0526 mL	0.2629 mL	0.5258 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

Ameri Z, et al. Telomerase inhibitor MST-312 induces apoptosis of multiple myeloma cells and down-regulation of anti-apoptotic, proliferative and inflammatory genes. *Life Sci.* 2019;228:66-71.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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