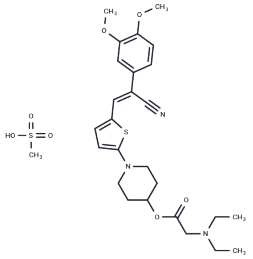
Data Sheet (Cat.No.T13366)

TargetMol

YHO-13351

Chemical Properties



CAS No. : 1346753-00-1

Formula: C27H37N3O7S2

Molecular Weight: 579.73

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	YHO-13351 is an ABCG2 inhibitor, an acrylonitrile derivative, that induces sensitization of cancer stem/initiating-like side population cells to irinotecan.GSK1702934A can be used to study diabetes.
Targets(IC50)	BCRP,ABC Transporter
In vitro	In the presence of YHO-13351 (0-0.1 μM), HeLa cells stained with Hoechst dye were analyzed by flow cytometry using a fluorescence-activated cell sorter, which revealed that YHO-13177 is capable of reducing the SP fraction score [2].
In vivo	When used in combination with irinotecan, YHO-13351 reduces the increase in the ratio of SP cells in tumors compared to treatment with irinotecan alone[2].

Solubility Information

Solubility	DMSO: 160 mg/mL (275.99 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 (8.62 mM),Sonication is recommended. *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	1.7249 mL	8.6247 mL	17.2494 mL
5 mM	0.345 mL	1.7249 mL	3.4499 mL
10 mM	0.1725 mL	0.8625 mL	1.7249 mL
50 mM	0.0345 mL	0.1725 mL	0.345 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

Yamazaki R, et al. Novel acrylonitrile derivatives, YHO-13177 and YHO-13351, reverse BCRP/ABCG2-mediated drug resistance in vitro and in vivo. Mol Cancer Ther. 2011 Jul;10(7):1252-63.
Shishido Y, Ueno S, Yamazaki R, Nagaoka M, Matsuzaki T. ABCG2 inhibitor YHO-13351 sensitizes cancer stem/initiating-like side population cells to irinotecan. Anticancer Res. 2013 Apr;33(4):1379-86.