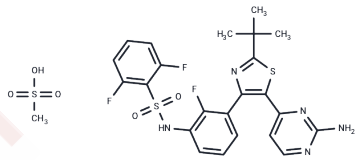
Data Sheet (Cat.No.T8474)

TargetMol

Dabrafenib Mesylate

Chemical Properties



CAS No. :	1195768-06-9
Formula:	C24H24F3N5O5S3
Molecular Weight:	615.67
Storage:	Keep away from direct sunlight,Store at low temperature 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	Dabrafenib Mesylate (GSK2118436 Mesylate) is a B-Raf inhibitor(IC50s of 0.6 and 5.0 nM for RafV600E and c-Raf, respectively).
Targets(IC50)	Raf
In vitro	In human endothelial cells, Dabrafenib inhibits the release of HMGB1 and down-regulates the HMGB1-dependent inflammatory response by enhancing the expression of cell adhesion molecules (CAM)[1]

Solubility Information

Solubility	DMSO: 85 mg/mL (138.06 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: 3.3 mg/mL (5.36 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	1.6242 mL	8.1212 mL	16.2425 mL
5 mM	0.3248 mL	1.6242 mL	3.2485 mL
10 mM	0.1624 mL	0.8121 mL	1.6242 mL
50 mM	0.0325 mL	0.1624 mL	0.3248 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

Jung B, et al. Anti-septic effects of dabrafenib on HMGB1-mediated inflammatory responses. BMB Rep. 2016 Apr; 49(4):214-9.

In vivo vulnerabilities to GPX4 and HDAC inhibitors in drug-persistent versus drug-resistant BRAFV600E lung adenocarcinoma

In vivo vulnerabilities to GPX4 and HDAC inhibitors in drug-persistent versus drug-resistant BRAFV600E lung adenocarcinoma

Lee S, et al. Anti-inflammatory effects of dabrafenib on polyphosphate-mediated vascular disruption. Chem Biol Interact. 2016 Jul 22.