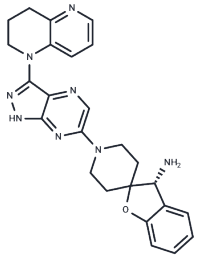
Data Sheet (Cat.No.T62798)

TargetMol

Migoprotafib

Chemical Properties



CAS No. : 2377352-49-1

Formula: C25H26N8O

Molecular Weight: 454.53

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	Migoprotafib (GDC-1971) is a potent and highly selective SHP2 (Src Homology-2 Domain-Containing Phosphatase 2) inhibitor for the study of advanced solid tumours.
Targets(IC50)	ERK,p38 MAPK,Phosphatase
In vitro	Migoprotafib is a selective SHP2 inhibitor that demonstrates potent antiproliferative activity in various tumor cell lines (e.g., NCI-H358, KYSE520, and LoVo). In vitro, Migoprotafib (0.001–10μM, 2–6 days) alone or in combination with KRAS G12C inhibitors (e.g., GDC-6036) significantly suppressed pERK levels and induced cell cycle arrest, indicating effective MAPK pathway inhibition[1].
In vivo	In mouse xenograft models, Migoprotafib (30–60mg/kg, oral gavage, once daily) showed strong antitumor efficacy, particularly in combination with KRAS G12C inhibitors (e.g., GDC-6036), resulting in complete or substantial tumor regression (treatment up to 21 days)[1].

Solubility Information

Solubility	DMSO: 80 mg/mL (176.01 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 (7.26 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	2.2001 mL	11.0004 mL	22.0007 mL
5 mM	0.440 mL	2.2001 mL	4.4001 mL
10 mM	0.220 mL	1.100 mL	2.2001 mL
50 mM	0.044 mL	0.220 mL	0.440 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

Danilo Maddalo, Ashley DiMarco, Mirunalini Ravicahndran et al. RIT1M90I is a driver of lung adenocarcinoma tumorigenesis and resistance to targeted therapy, 20 March 2024, PREPRINT (Version 1) available at Research Square.