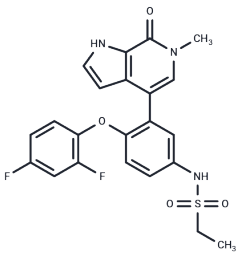
Data Sheet (Cat.No.T3712)

TargetMol

Mivebresib

Chemical Properties



CAS No. : 1445993-26-9

Formula: C22H19F2N3O4S

Molecular Weight: 459.47

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	Mivebresib (ABBV-075), also known as ABBV-075, is a potent BET inhibitor (bromodomain (BRD)-containing protein) with potential antineoplastic activity. Upon administration, the bromodomain inhibitor ABBV-075 binds to the acetyl-lysine binding site in the BRD of certain BRD-containing protein(s), thereby preventing the interaction between those proteins and acetylated histones. This disrupts chromatin remodeling, prevents the expression of certain growth-promoting genes, and leads to an inhibition of cell growth in susceptible tumors. Also a potent inhibitor of MYC and the TMPRSS2-ETS fusion proteins.
Targets(IC50)	Apoptosis,Epigenetic Reader Domain
In vitro	Mivebresib exhibits robust single agent activity in cell viability assays across cancer cell lines derived from solid tumors, leukemia and lymphomas. It could disrupt cell cycle control leading to G1 arrest followed by senescence, inhibit oncogenesis drivers leading to apoptosis, and potentially target tumor microenvironment to provide additional therapeutic benefit[1].
In vivo	ABBV-075 has comparable or superior efficacies to standard of care agents in flank xenograft mouse models of non-small-cell and small cell lung cancers, pancreatic, breast, prostate, head & neck cancers, multiple myeloma, diffuse large B cell lymphoma and leukemia[1].

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 250 mg/mL (544.11 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: 10 mg/mL (21.76 mM),Suspension. 10% DMSO+90% Saline: < 10 mg/mL (21.76 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	2.1764 mL	10.8821 mL	21.7642 mL
5 mM	0.4353 mL	2.1764 mL	4.3528 mL
10 mM	0.2176 mL	1.0882 mL	2.1764 mL
50 mM	0.0435 mL	0.2176 mL	0.4353 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

Aparna Sarthy, et al. Experimental and Molecular Therapeutics. 2016, Abstract 4718.