Data Sheet (Cat.No.T7163)

PF-05175157

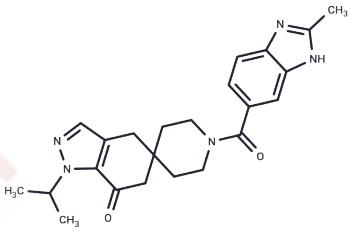
Chemical Properties

CAS No. : 1301214-47-0

Formula: C23H27N5O2

Molecular Weight: 405.49

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	PF 05175157 is an inhibitor of acetyl-CoA carboxylase 1 (ACC1) and ACC2 (IC50s = 27, 33, 23.5, and 50.4 nM for human ACC1, human ACC2, rat ACC1, and rat ACC2, respectively
Targets(IC50)	Acetyl-CoA Carboxylase
In vivo	PF-05175157 induced a reduction of the viral load in serum and kidney in WNV-infected mice, unveiling its therapeutic potential for the treatment of chronic kidney disease associated with persistent WNV infection.
Animal Research	Pharmacokinetics was analyzed after a single oral dose of the compounds (in a 0.5% methyl cellulose suspension) administered to fasted male mice. A dose of 15 mg/kg for PF-05175157 or 100 mg/kg in the case of PF-05206574 and PF-06256254 was analyzed. Antiviral activity in vivo was determined using eight-week-old Swiss albino CD-1 female mice. Animals were treated with PF-05175157 (20 mg/kg) suspended in 1% carboxymethylcellulose by oral gavage twice a day from 1 d before infection with WNV (1 × 10^4 PFU/mouse intraperitoneally) and up to 7 days post-infection. Control mice were treated in parallel with drug vehicle (carboxymethylcellulose). For experiments evaluating the effect of genetic deletion of ACC2 gene on WNV infection, a breeding colony of C57BL/6 ACC2-/- mice was established from two heterozygous Acabtm1Dejs females . Age- and sex-matched eight-week-old ACC2-/- and control wild type (WT) mice were challenged with WNV (1 × 10^4 PFU/animal.). Animals were monitored daily and received water and food ad libitum.

Solubility Information

Solubility	DMSO: 140 mg/mL (345.26 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (24.66 mM),Suspension. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.47 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	2.4662 mL	12.3308 mL	24.6615 mL
5 mM	0.4932 mL	2.4662 mL	4.9323 mL
10 mM	0.2466 mL	1.2331 mL	2.4662 mL
50 mM	0.0493 mL	0.2466 mL	0.4932 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

Jiménez de Oya, Nereida, Esler W P , Huard K , et al. Targeting host metabolism by inhibition of acetyl-Coenzyme A carboxylase reduces flavivirus infection in mouse models[J]. Emerging Microbes & Infections, 2019, 8(1):624-636.