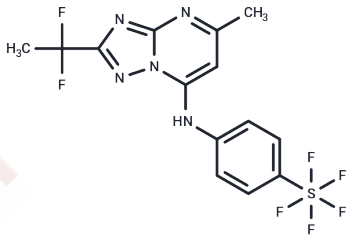
Data Sheet (Cat.No.T15173)

TargetMol

DSM265

Chemical Properties



CAS No. : 1282041-94-4

Formula: C14H12F7N5S

Molecular Weight: 415.33

Storage: 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	DSM265 (PfSPZ) is a dihydroorotic acid dehydrogenase inhibitor with antimalarial activity (IC50: 8.9 nM).DSM265 inhibits the growth of Pf3D7 parasites and can be used for the treatment and prophylaxis of malaria infections.
Targets(IC50)	Parasite,Dehydrogenase
In vivo	In NOD-scid IL-2Rγnull (NSG) mice (23-36 g), DSM265 (0.5 - 75 mg/kg; oral administration; twice daily; for 4 days) exhibited potent antimalarial activity[2].

Solubility Information

Solubility	H2O: < 0.1 mg/mL (insoluble.) Ethanol: 5 mg/mL (12.04 mM),Sonication is recommended. DMSO: 30 mg/mL (72.23 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: 2 mg/mL (4.82 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	2.4077 mL	12.0386 mL	24.0772 mL
5 mM	0.4815 mL	2.4077 mL	4.8154 mL
10 mM	0.2408 mL	1.2039 mL	2.4077 mL
50 mM	0.0482 mL	0.2408 mL	0.4815 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

Kokkonda S, et al. Tetrahydro-2-naphthyl and 2-Indanyl Triazolopyrimidines Targeting Plasmodium falciparumDihydroorotate Dehydrogenase Display Potent and Selective Antimalarial Activity. J Med Chem. 2016 Jun 9;59(11):5416-31.

Phillips MA, et al. A long-duration dihydroorotate dehydrogenase inhibitor (DSM265) for prevention and treatment of malaria. Sci Transl Med. 2015 Jul 15;7(296):296ra111.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481