

Antileishmanial agent-17

Chemical Properties

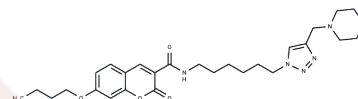
CAS No. : 2934738-40-4

Formula: C₂₇H₃₇N₅O₅

Molecular Weight: 511.61

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	Antileishmanial agent-17, a coumarin hybrid, exhibits potent antileishmanial activity (IC ₅₀ <0.78 μM) while proving non-toxic to normal VERO cells. It specifically interacts with the folate pathway enzymes pteridine reductase and DHFR-TS. Efficacy against the promastigote form is highlighted by an IC ₅₀ value of 0.40 μM, and against the amastigote form, an IC ₅₀ of 0.68 μM, respectively.
Targets(IC ₅₀)	Parasite
In vitro	Antileishmanial agent-17 (compound 14b) inhibits the folate pathway, demonstrating inhibition rates of 82% and 91% for folates, and 88% and 91% for dihydrofolates at concentrations of 20 μM and 100 μM, respectively [1]. It exhibits low cytotoxicity against African green monkey kidney cells (VERO cells), with a CC ₅₀ of 244.3 μM [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9546 mL	9.7731 mL	19.5461 mL
5 mM	0.3909 mL	1.9546 mL	3.9092 mL
10 mM	0.1955 mL	0.9773 mL	1.9546 mL
50 mM	0.0391 mL	0.1955 mL	0.3909 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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