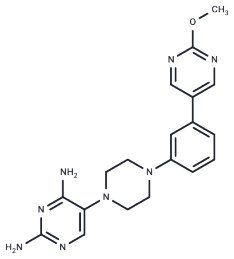
Data Sheet (Cat.No.T36692)

TargetMol
YOUR TARGET MOLECULES

Fanotaprim

Chemical Properties



CAS No. : 2120282-75-7

Formula: C19H22N8O

Molecular Weight: 378.43

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Fanotaprim is a dihydrofolate reductase (DHFR) inhibitor. Fanotaprim inhibits the growth of T. gondii strains with a TgDHFR IC50 of 1.57 ± 0.11 nM and a hDHFR IC50 of 308 ± 71 nM and a hDHFR to TgDHFR selectivity ratio of 196.
Targets(IC50)	DHFR
In vitro	Fanotaprim shows parasiticidal and antiproliferative effects with EC50s of 13 and 7300 nM against the type I RH strain of T. gondii and MCF-7 cells, respectively[1].Fanotaprim shows ability to inhibit the growth of T. gondii strains in vitro with EC50s ranging 7.6~29.8 nM (GT1, ME49, CTG, RUB and VAND)[1].
In vivo	Fanotaprim (1-10 mg/kg; p.o.; daily; beginning on day 1 through day 7) shows highly effective in control of acute infection by highly virulent strains of T. gondii in the murine model[1].Fanotaprim (1mg/kg; i.v; mouse) shows CL, Vd, and t1/2 values of 10.6 mL/min/kg, 1.14 L/kg, and 3.9 hours, respectively[1].Fanotaprim (0.83 mg/kg; p.o; mouse) shows F, Cmax, Tmax, and AUC0-last of 47.3%, 178 ng/mL, 0.05 hours and 750 ng h/mL, respectively[1].

Solubility Information

Solubility	DMSO: 25 mg/mL (66.06 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6425 mL	13.2125 mL	26.425 mL
5 mM	0.5285 mL	2.6425 mL	5.285 mL
10 mM	0.2642 mL	1.3212 mL	2.6425 mL
50 mM	0.0528 mL	0.2642 mL	0.5285 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.

Reference

Hopper AT, et al. Discovery of Selective Toxoplasma gondii Dihydrofolate Reductase Inhibitors for the Treatment of Toxoplasmosis. J Med Chem. 2019;62(3):1562-1576.

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