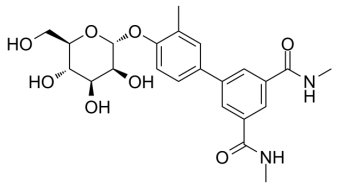
M4284

Cat. No.:	HY-120568
CAS No.:	1373346-85-0
Molecular Formula:	$C_{23}H_{28}N_2O_8$
Molecular Weight:	460.48
Target:	Bacterial
Pathway:	Anti-infection

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (271.46 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.1716 mL	10.8582 mL	21.7165 mL
5 mM	0.4343 mL	2.1716 mL	4.3433 mL
10 mM	0.2172 mL	1.0858 mL	2.1716 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 6.25 mg/mL (13.57 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 6.25 mg/mL (13.57 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

M4284 is a selective and orally active biphenyl mannoside FimH antagonist. M4284 has activities against different UPEC (Urinary tract infections (UTI) caused by uropathogenic E. coli) strains in different host genetic backgrounds and gut microbial community contexts[1].

IC_{50} & Target

IC50: FimH[1]

In Vivo

M4284 (oral administration; 100 mg/kg; 3 doses) can reduces UTI89 levels in the gut and urinary tracts of mice that are concurrently colonized with UTI89 in the gut and bladder. And treating mice with additonal M4284 doses further reduces the UTI89 population and the number of UPEC is lower in M4284-treated mice after termination of treatment[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	C3H/HeN mice[1].
Dosage:	100 mg/kg
Administration:	Oral administation; a single dose.
Result:	Had activities against different UPEC strains in different host genetic backgrounds and gut microbial community contexts.

REFERENCES

[1]. Schaeffer EM, et al.Selective Depletion of Uropathogenic E. coli from the Gut by a FimH Antagonist.SelectivJ Urol. 2018 Apr;199(4):874-875.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA