Mycophenolate Mofetil

Cat. No.: HY-B0199

CAS No.: 128794-94-5

Molecular Formula: $C_{23}H_{31}NO_7$

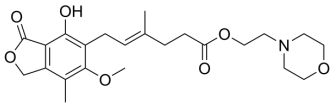
Molecular Weight: 433.49

Target: Apoptosis; Drug Metabolite; Endogenous Metabolite; Bacterial

Pathway: Apoptosis; Metabolic Enzyme/Protease; Anti-infection

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	1 year
	-20°C	6 months



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (230.69 mM; Need ultrasonic)
1M NaOH : 33.33 mg/mL (76.89 mM; ultrasonic and adjust pH to 12 with 1M NaOH)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.3069 mL	11.5343 mL	23.0686 mL
5 mM	0.4614 mL	2.3069 mL	4.6137 mL
10 mM	0.2307 mL	1.1534 mL	2.3069 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: ≥ 2.5 mg/mL (5.77 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (5.77 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.77 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Mycophenolate mofetil (RS 61443) is the morpholinoethylester proagent of Mycophenolic acid. Mycophenolate mofetil inhibits de novo purine synthesis via the inhibition of inosine monophosphate dehydrogenase (IMPDH). Mycophenolate mofetil shows selective lymphocyte antiproliferative effects involve both T and B cells, preventing antibody formation[1].

In Vitro

The inosine monophosphate dehydrogenase is an important enzyme in the de novo synthesis of guanosine nucleotides in T and B lymphocytes[1].

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

CUSTOMER VALIDATION

- J Control Release. 2020 Dec 10;328:237-250.
- Hepatobiliary Surg Nutr. 2023 Feb 27.
- Biomed Pharmacother. 2019 Oct;118:109305.
- J Transl Med. 2024 Feb 3;22(1):133.
- J Ethnopharmacol. 2021 Dec 14;114918.

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REFERENCES

[1]. Simmons WD, et al. Preliminary risk-benefit assessment of mycophenolate mofetil in transplant rejection. Drug Saf. 1997;17(2):75-92.

[2]. Fulton B, et al. Mycophenolate mofetil. A review of its pharmacodynamic and pharmacokinetic properties and clinical efficacy in renal transplantation. Drugs. 1996;51(2):278-298.

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