

Mycophenolic acid

Chemical Properties

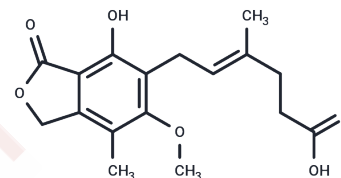
CAS No. : 24280-93-1

Formula: C₁₇H₂₀O₆

Molecular Weight: 320.34

Storage: Store at low temperature, Keep away from moisture
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 | Mycophenolic acid (Mycophenolate) is an inosine monophosphate dehydrogenase (IMPDH) inhibitor with anti-proliferative activity. |
| Targets(IC50) | Apoptosis, Anti-infection, Endogenous Metabolite, Antibacterial, Antibiotic, Antifungal, Dehydrogenase, UGT |
| In vitro | In murine models, Mycophenolic acid selectively inhibits lymphocyte proliferation, cellular-mediated immune responses, and humoral immune responses. |
| In vivo | In cultured human, mouse, and rat T lymphocytes and B lymphocytes, Mycophenolic acid inhibits mitogen-induced proliferative responses. Mycophenolic acid can also induce apoptosis in activated CD4+ T cells. |

Solubility Information

| | |
|---------------------|---|
| Solubility | DMSO: 125 mg/mL (390.21 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+90% Saline: < 10 mg/mL (31.22 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (31.22 mM), Solution. <i>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.</i> |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 3.1217 mL | 15.6084 mL | 31.2168 mL |
| 5 mM | 0.6243 mL | 3.1217 mL | 6.2434 mL |
| 10 mM | 0.3122 mL | 1.5608 mL | 3.1217 mL |
| 50 mM | 0.0624 mL | 0.3122 mL | 0.6243 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

Sintchak MD, et al. Cell, 1996, 85(6), 921-930.

Zeng X, Zhu S, Lu W, et al. Target identification among known drugs by deep learning from heterogeneous networks. Chemical Science. 2020, 11(7): 1775-1797.

Hu M, Wu T, Yang Y, et al. Development and Characterization of a Genetically Stable Infectious Clone for a Genotype I Isolate of Dengue Virus Serotype 1. Viruses. 2022, 14(9): 2073.

Eugui EM, et al. Scand J Immunol, 1991, 33(2), 161-173.

Anderson D, et al. Mutat Res, 1995, 330(1-2), 115-181.

Hu M, Li W F, Wu T, et al. Identification of an Arylnaphthalene Lignan Derivative as an Inhibitor against Dengue Virus Serotypes 1 to 4 (DENV-1 to-4) Using a Newly Developed DENV-3 Infectious Clone and Replicon. Microbiology Spectrum. 2023: e00423-23.

Zheng M, Li J, Guo H, et al. IMPDH inhibitors upregulate PD-L1 in cancer cells without impairing immune checkpoint inhibitor efficacy. Acta Pharmacologica Sinica. 2024: 1-10.

Chapuis AG, et al. Nat Med, 2000, 6(7), 762-768.

Zeng X, Zhu S, Lu W, et al. Target identification among known drugs by deep learning from heterogeneous networks[J]. Chemical Science. 2020, 11(7): 1775-1797.

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