

15-4011: Mycophenolic acid

Alternative Name : MPA; NSC 129185; Ly 68618; Mycophenolate

Description

Isolated from *Penicillium brevi-compactum*. Antibiotic [1]. Shows antiviral, antifungal and antitumor properties [1, 2]. Immunosuppressive drug used to prevent rejection in organ transplantation, rheumatoid arthritis, and psoriasis [3-6, 13]. Potent reversible inhibitor of inosine-5'-monophosphate dehydrogenase (IMPDH), leading to depletion of GMP and interruption of the de novo synthesis of purine nucleotides necessary for B and T lymphocyte proliferation [7, 8]. Inhibits the type II IMPDH isoform (IMPDH-2) 5-fold more potently compared to type I isoform [11]. Inhibits RNA and DNA synthesis [13]. Inducible nitric oxide synthase (iNOS/NOS II) inhibitor [8, 10]. Apoptosis and necrosis inducer [9, 12]. Novel type of inhibitor against RNA guanylyltransferases [14]. Inhibits TNF-Alpha-stimulated MAPK/NF-kB and ROS generation [15]. Autophagy suppressor. Broad-spectrum antiviral compound with inhibitory activity against different coronavirus, including SARS-CoV, MERS-CoV and SARS-CoV-2, cause of COVID-19. It binds to the active site of SARS-CoV-2 papain-like protease (PLpro) possibly inhibiting viral replication.

Product Info

Amount : 500 mg / 100 mg
Purification : $\geq 98\%$ (HPLC, TLC)
Storage condition : Stable for at least 2 years after receipt when stored at +4°C.

Application Note

MW :320.3