

Product ID M9710 CAS No. 24280-93-1 **Chemical Name** 

## Synonym

Formula C<sub>17</sub>H<sub>20</sub>O<sub>6</sub> Formula Wt. 320.34 Melting Point 140-143°C Purity ≥98% Solubility DMSO, Ethanol, Methanol, DCM. Insoluble in water

Store Temp Ambient

Ship Temp Ambient

Description Mycophenolic acid exhibits immunosuppressive, antiviral, and anticancer activities. Mycophenolic acid inhibits B cell activation and decreases the number of plasmablasts in clinical subjects with systemic lupus erythmatosus (SLE). Mycophenolic acid also induces necrotic cell death in B and T lymphocytes in a Cdc42- and actin polymerization-mediated manner. In other cellular models, mycophenolic acid decreases levels of TGF-B and ROS and suppresses synthesis of extracellular matrix components, decreasing proliferation of mesangial cells. In breast cancer cells, mycophenolic acid activates peroxisome proliferatoractivated receptors (PPARy), increasing lipid accumulation and cell size and inducing cell cycle arrest. Derivatives of mycophenolic acid inhibit histone deacetylases (HDACs) and suppress tubulin polymerization. Mycophenolic acid also inhibits inosine monophosphate dehydrogenase (IMPDH), inhibiting the NAD+/NADH conversion and decreasing intracellular stores of GTP.

References Rinaldelli E, Panattoni A, Luvisi A, et al. Effect of mycophenolic acid on trans-plasma membrane electron transport and electric potential in virus-infected plant tissue. Plant Physiol Biochem. 2012 Nov;60:137-40. PMID: 22935477.

> Eickenberg S, Mickholz E, Jung E, et al. Mycophenolic acid counteracts B cell proliferation and plasmablast formation in patients with systemic lupus erythematosus. Arthritis Res Ther. 2012;14(3):R110. PMID: 22571761.

Zheng ZH, Yang Y, Lu XH, et al. Mycophenolic acid induces adipocyte-like differentiation and reversal of malignancy of breast cancer cells partly through PPARy. Eur J Pharmacol. 2011 May 1;658(1):1-8. PMID: 21349264.

Huh KH, Ahn HJ, Park J, et al. Mycophenolic acid inhibits oleic acid-induced mesangial cell activation through both cellular reactive oxygen species and inosine monophosphate dehydrogenase 2 pathways. Pediatr Nephrol. 2009 Apr;24(4):737-45. PMID: 19093139.

Chaigne-Delalande B, Guidicelli G, Couzi L, et al. The immunosuppressor mycophenolic acid kills activated lymphocytes by inducing a nonclassical actin-dependent necrotic signal. J Immunol. 2008 Dec 1;181(11):7630-8. PMID: 19017951.

M9710 50 mg M9710 250 mg M9710 500 mg

1 g

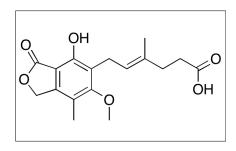
Product ID Size

M9710

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.

Phone: 888-558-5227 651-644-8424 Fax: 888-558-7329 Email: getinfo@lktlabs.com Web: lktlabs.com

## **Product Information**



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