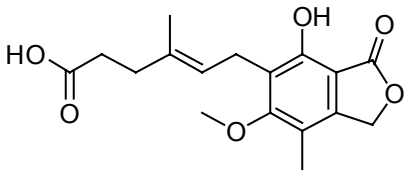
bioaustralis
fine chemicals

PRODUCT DATA SHEET

Mycophenolic acid

Code: **BIA-M1207**

Pack sizes: **25 mg, 100 mg**



Synonyms : **Melbex, Lilly 68618, NSC 129185**

Specifications

CAS #	:	**24280-93-1**
Molecular Formula	:	**$C_{17}H_{20}O_6$**
Molecular Weight	:	**320.3**
Source	:	***Penicillium* sp. MST-FP1988**
Appearance	:	**White solid**
Purity	:	**> 99%**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility**

Application Notes

Mycophenolic acid is a common Penicillium metabolite first reported in the 1930s as a possible mycotoxin. Re-investigation has shown mycophenolic acid to display a broad range of pharmacological activities including antitumor, antiviral, antifungal and antiprotozoan activities. However, it was the discovery that mycophenolic acid was a potent immunosuppressant, useful to prevent kidney transplant rejection, that led to its commercial development and that of related semi-synthetics as pharmaceuticals. Mycophenolic acid acts by inihibition of inosine monophosphate dehydrogenase, controlling the rate of *de novo* purine synthesis in the proliferation of B and T lymphocytes.

References

1. Studies in the biochemistry of micro-organisms. The molecular constitution of the metabolic products of *Penicillium brevi-compactum Dierckx* and related species. II. Mycophenolic acid. Clutterbuck P.W. & Raistrick H., Biochem J. 1933, 27, 654.
2. Mycophenolic acid: An anti-cancer compound with unusual properties. Carter S. B. et al., Nature 1969, 223, 848.
3. Conformational changes and stabilization of inosine 5'-monophosphate dehydrogenase associated with ligand binding and inhibition by mycophenolic acid. Nimmesgern E. et al., J. Biol. Chem. 1996, 271, 19421.

Building C, 28-54 Percival Road, Smithfield NSW 2164, AUSTRALIA
Tel: 61 2 9757 4515 Fax: 81 2 9757 2586 Web: www.bioaustralis.com Email: info@bioaustralis.com