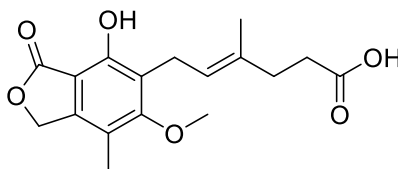


## Mycophenolic acid

Code No.: **BIA-M1207**

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



Synonyms : Melbex, Lilly 68618, NSC 129185

## Specifications

CAS #	: <b>24280-93-1</b>
Molecular Formula	: <b>C<sub>17</sub>H<sub>20</sub>O<sub>6</sub></b>
Molecular Weight	: <b>320.3</b>
Source	: <b><i>Penicillium</i> sp.</b>
Appearance	: <b>White solid</b>
Purity	: <b>&gt;98% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.</b>

## Application Notes

Mycophenolic acid is a common *Penicillium* metabolite first reported in the 1930s as a possible mycotoxin. Re-investigation showed mycophenolic acid to display broad antitumor, antiviral, antifungal and antiprotozoan activities. Its potent immunosuppressant activity led to its commercial development to prevent kidney transplant rejection. Mycophenolic acid acts by inhibiting inosine monophosphate dehydrogenase, controlling the rate of de novo purine synthesis in proliferating 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.