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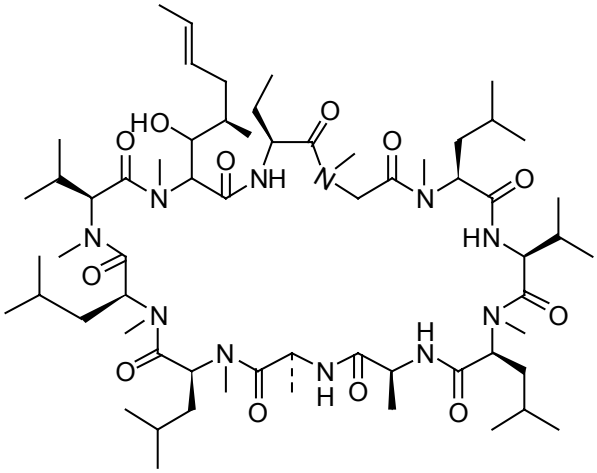
PRODUCT DATA SHEET

Cyclosporin A

Code: **BIA-C1208**

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



Synonyms : **Ciclosporin, Cyclorin, Neoral, Ramihyphin A, Sandimmun, Sandimmune, OL 27-400, S 7481F1, CyA, Antibiotic S 7481F1**

Specifications

CAS #	:	**59865-13-3**
Molecular Formula	:	**$C_{62}H_{111}N_{11}O_{12}$**
Molecular Weight	:	**1202.6**
Source	:	***Trichoderma* sp. MST-MF544**
Appearance	:	**White solid**
Purity	:	**> 99%**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility**

Application Notes

Cyclosporin A is a hydrophobic cyclic peptide isolated from several fungal species including in the genera *Cylindrocarpon*, *Fusarium*, *Trichoderma* and *Tolypocladium*. Cyclosporin A acts as an inhibitor of T-cell activation and has been marketed since 1983 as an immunosuppressant in post-allogeneic organ transplant. Cyclosporin A acts by binding to the protein cyclophilin (immunophilin) in T-lymphocytes causing inhibition of calcineurin (protein phosphatase 2B). It reduces transcription of interleukin 2, and inhibits lymphokine production, interleukin release and nitric oxide synthesis induced by interleukin 1α, lipopolysaccharides and TNFα.

References

1. Cyclosporin A, ein immunsuppressiv wirksamer Peptidmetabolit aus *Trichoderma polysporum*. Ruegger A. *et al*., Helv. Chim. Acta 1976, 59, 1480.
2. Pharmacology of cyclosporine (sandimmune). IV. Pharmacological properties *in vivo*. Borel J.F., Pharmac. Rev. 1989, 41, 259.
3. Cyclosporin A mediates immunosuppression of primary cytotoxic T-cell responses by impairing the release of interleukin 1 and interleukin 2. Bunjes D. et al., Europ. J. Immun. 1981, 11, 657.

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