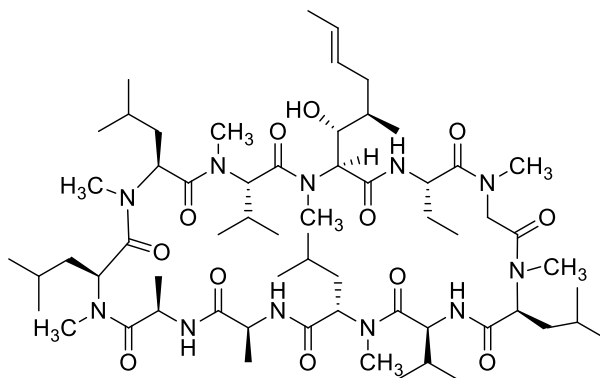


## Cyclosporin A

Code No.: **BIA-C1208**

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



Synonyms : Ciclosporin, Ramihyphin A, OL 27-400, CyA, S 7481F1

## Specifications

CAS #	: <b>59865-13-3</b>
Molecular Formula	: <b>C<sub>62</sub>H<sub>111</sub>N<sub>11</sub>O<sub>12</sub></b>
Molecular Weight	: <b>1202.6</b>
Source	: <b><i>Trichoderma sp.</i></b>
Appearance	: <b>White solid</b>
Purity	: <b>&gt;95% 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

Cyclosporin A is a hydrophobic cyclic peptide isolated from several fungal species including *Cylindrocarpon*, *Fusarium*, *Trichoderma* and *Tolyposcladium*. Cyclosporin A inhibits 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). Cyclosporin A reduces transcription of interleukin 2, and inhibits lymphokine production, interleukin release and NO synthesis induced by interleukin 1 $\alpha$ , lipopolysaccharides and TNF $\alpha$ .

## 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.