

C-6000 Cyclosporin A, >99%

[Cyclosporine] [Antibiotic S 7481F1] [Ciclosporin A] [Ramihyphin A] [CsA]

M.W. 1202.64

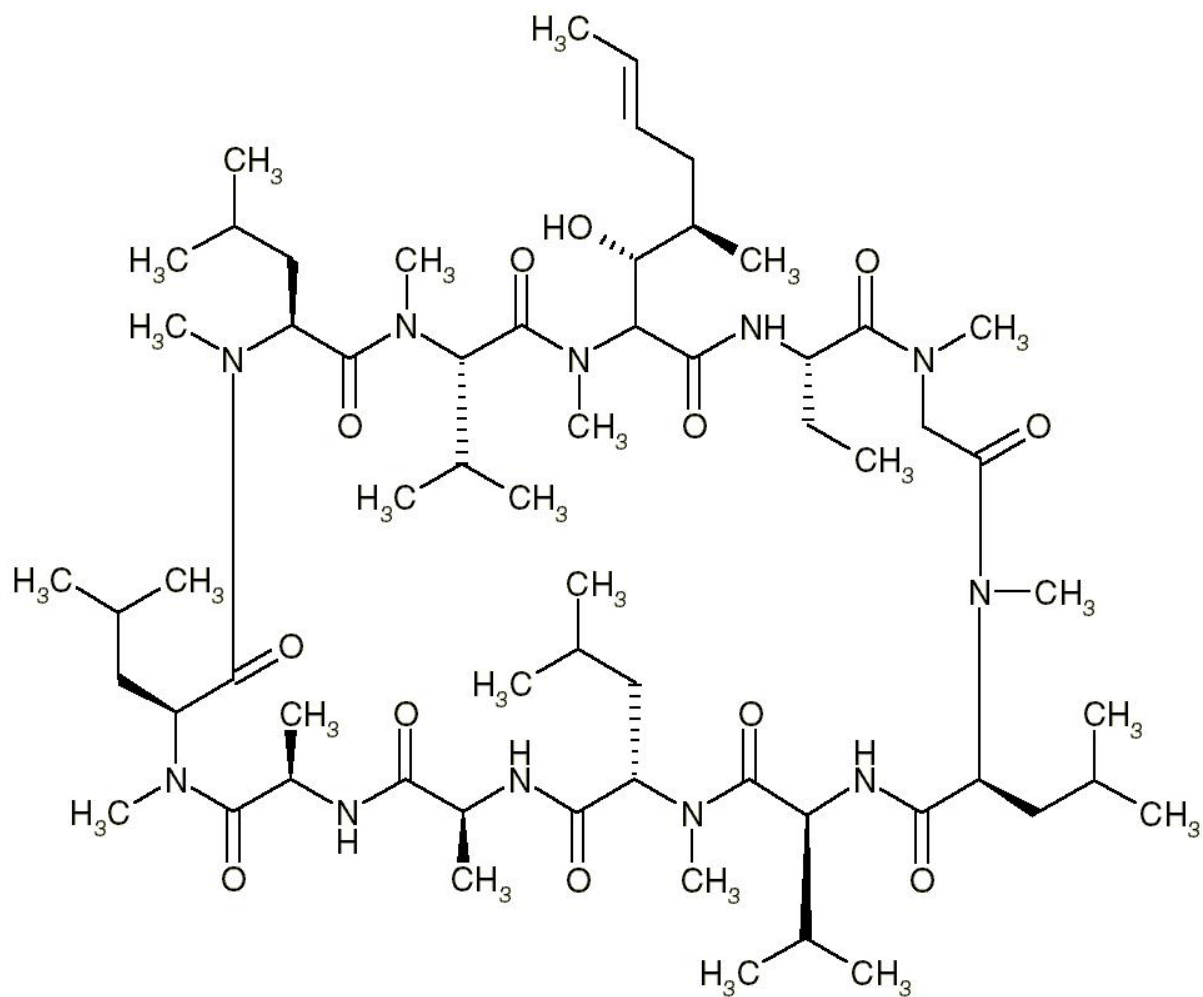
$C_{62}H_{111}N_{11}O_{12}$

[59865-13-3]
RTECS GZ4120000

M.I. 12: 2821

Storage: Store at or below -20 °C. **Solubility:** Soluble in DMSO or ethanol. **Disposal:** A

- Cyclic hydrophobic oligopeptide isolated from the filamentous fungi, *Tolypocladium inflatum*, with potent immunosuppressant properties. Induces apoptosis in rat thymocytes and in murine B cell lymphoma cells, but prevents apoptosis in BLB cell lines induced by anti-IgM and ionomycin. Donjerkovic, D. *et al.* "Regulation of p27Kip1 accumulation in murine B-lymphoma cells: role of c-Myc and calcium." *Cell. Growth Differ.* **10**: 695-704 (1999). Mordvinov, V.A. *et al.* "A human T-cell line with inducible production of interleukins 5 and 4. A model for studies of gene expression." *J. Immunol. Methods* **228**: 163-168 (1999). Zaidan, E. *et al.* "Cyclosporin A-sensitive changes in mitochondrial glutathione are an early response to intrastriatal NMDA or forebrain ischemia in rats." *J. Neurochem.* **73**: 2214-2217 (1999). Gottschalk, A.R., *et al.* "Identification of immunosuppressant-induced apoptosis in a murine B-cell line and its prevention by bcl-x but not bcl-2." *Proc. Natl. Acad. Sci. USA* **91**: 7350-7354 (1994).
- The complex of cyclosporin A with the protein cyclophilin inhibits T-cell receptor signal transduction pathway via the inhibition of calcineurin (protein phosphatase 2B) with nanomolar affinity ($K_i = 270$ nM). Etzkorn, F.A., Chang, Z.Y., Stolz, L.A., Walsh, C.T. Cyclophilin residues that affect noncompetitive inhibition of the protein serine phosphatase activity of calcineurin by the cyclophilin-cyclosporin A complex." *Biochemistry* **33**: 2380-2388 (1994). Liu, J. "FK506 and ciclosporin: molecular probes for studying intracellular signal transduction." *Trends Pharmacol. Sci.* **14**: 182-188 (1993).
- Inhibits interleukin-1 α -, lipopolysaccharide-, and TNF- α -nitric oxide synthesis induction. Fast, D.J., *et al.* "Cyclosporin A inhibits nitric oxide production by L929 cells in response to tumor necrosis factor and interferon-gamma." *J. Interferon Res.* **13**: 235-240 (1993). Marumo, T., *et al.* "Cyclosporin A inhibits nitric oxide synthase induction in vascular smooth muscle cells." *Hypertension* **25**: 764-768 (1995). Hattori, Y., and Naranishi, N. "Effects of cyclosporin A and FK506 on nitric oxide and tetrahydrobiopterin synthesis in bacterial lipopolysaccharide-treated J774 macrophages." *Cell Immunol.* **165**: 7-11 (1995).
- See also our other standard immunosuppressant products:



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