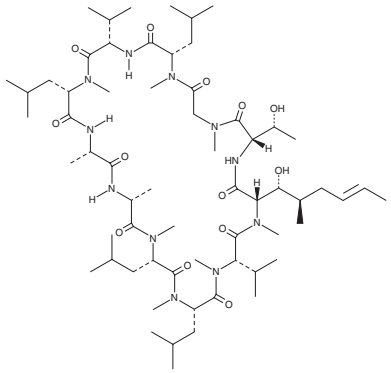
PRODUCT INFORMATION

Cyclosporin C

Item No. 29152



CAS Registry No.:	59787-61-0
Formal Name:	7-L-threonine-cyclosporin A
MF:	$C_{62}H_{111}N_{11}O_{13}$
FW:	1,218.6
Purity:	≥95%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Fungi

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cyclosporin C is supplied as a crystalline solid. A stock solution may be made by dissolving the cyclosporin C in the solvent of choice, which should be purged with an inert gas. Cyclosporin C is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of cyclosporin C in these solvents is approximately 14, 3, and 20 mg/ml, respectively.

Cyclosporin C is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cyclosporin C should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Cyclosporin C has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Cyclosporin C is a fungal metabolite that has been found in *T. inflatum* and has diverse biological activities, including antifungal, antiviral, and immunosuppressant properties.[1-4] It is active against isolates of *B. cinerea*, *A. niger*, and *Alternaria*, *Mucor*, and *Penicillium* species (MICs = 0.1-5 µg/ml).[2] Cyclosporin C (15 µg/ml) inhibits vaccinia virus replication in infected BSC40 cells by 98.82%.[3] It inhibits lymphocyte proliferation induced by the mitogens concanavalin A (ConA; Item No. 14951), phytohemagglutinin L (PHA), and pokeweed mitogen (PWM), as well as proliferation induced by alloantigen in mixed lymphocyte culture when used at a concentration of 100 ng/ml.[4] Cyclosporin C (100 ng/ml) inhibits the local graft *versus* host (GVH) reaction in mice receiving splenocyte grafts.

References

1. von Wartburg, A. and Traber, R. Cyclosporins, fungal metabolites with immunosuppressive activities. *Prog. Med. Chem.* **25**, 1-33 (1988).
2. Moussaïf, M., Jacques, P., Schaarwächter, P., *et al.* Cyclosporin C is the main antifungal compound produced by *Acremonium luzulae*. *Appl. Environ. Microbiol.* **63(5)**, 1739-1743 (1997).
3. Damaso, C.R. and Moussatché, N. Inhibition of vaccinia virus replication by cyclosporin A analogues correlates with their affinity for cellular cyclophilins. *J. Gen. Virol.* **79(Pt 2)**, 339-346 (1998).
4. Sadeg, N., Pham-Huy, C., Rucay, P., *et al. In vitro* and *in vivo* comparative studies on immunosuppressive properties of cyclosporines A, C, D and metabolites M1, M17 and M21. *Immunopharmacol. Immunotoxicol.* **15(2-3)**, 163-177 (1993).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM