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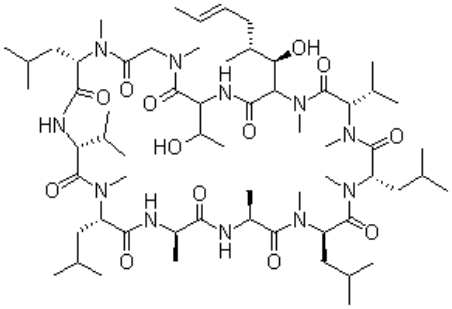
Product Information

Cyclosporin C from *Acremonium luzulae*

Catalog Number **SML0192**
Storage Temperature –20 °C

CAS RN 59787-61-0
Synonyms: Cyclosporine C, 7-Threonine-cyclosporin A

Product Description
Molecular formula: $C_{62}H_{111}N_{11}O_{13}$
Molecular weight: 1218.61



Cyclosporins are a family of neutral, highly lipophilic, cyclic undecapeptides containing some unusual amino acids.[1] Cyclosporin A (CsA) is the main representative of cyclosporins. It has antifungal activity and is the strongest immunosuppressive compound discovered so far. Cyclosporin C has the same activity with reduced potency.[1,2] CsA has potent anti-Hepatitis C Virus (HCV) activity towards both HCV replicons.[3] Cyclophilins are intracellular proteins, highly conserved, involved in *cis-trans* isomerization of peptidyl-prolyl bonds and protein folding which bind cyclosporins and as a complex inhibit the activity of calcineurin, a phosphatase necessary for T-cell activation.[4,5] Cyclosporin is therefore used for treating autoimmune disorders such as rheumatoid arthritis, systemic lupus erythematosus (SLE), and psoriasis.[6-8]

Purity: ≥95% (HPLC)

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
Soluble in DMSO (at least 10 mg/mL) and various other organic solvents. Insoluble in water and hexane.

Storage/Stability
Store the product sealed at –20 °C.
Under these conditions the product is stable for at least 2 years. Solution in DMSO is stable for up to one month at –20 °C.

References
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4. Zydowsky, L.D., et al., Active site mutants of human cyclophilin A separate peptidyl-prolyl isomerase activity from cyclosporin A binding and calcineurin inhibition. *Prot. Science*, **1**, 1092-1099 (1992).
5. Franke, E.K., et al., Cyclophilin binding to the Human Immunodeficiency Virus Type 1 Gag polyprotein is mimicked by an anti-cyclosporin antibody. *J. Virol.*, **69**, 5821–5823 (1995).
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DWF,KAA,PHC 10/11-1