

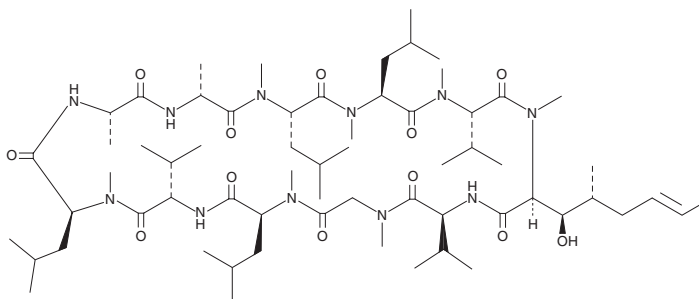
PRODUCT INFORMATION



Cyclosporin D

Item No. 15477

CAS Registry No.: 63775-96-2
Formal Name: 7-L-valine-cyclosporin A
MF: $C_{63}H_{113}N_{11}O_{12}$
FW: 1,216.7
Purity: $\geq 95\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 2 years



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

Laboratory Procedures

Cyclosporin D is supplied as a solid. A stock solution may be made by dissolving the cyclosporin D in the solvent of choice. Cyclosporin D is soluble in the organic solvent ethanol, which should be purged with an inert gas. We do not recommend storing the aqueous solution for more than one day.

Description

Cyclosporin D is a metabolite of cyclosporin A, an immunosuppressant drug that binds cyclophilin D, inhibiting the phosphatase activity of calcineurin in T cells.^{1,2} Cyclosporin D displays about 10% lower immunosuppressant activity than cyclosporin A.^{3,4} Cyclosporin D has been used as an internal standard for the quantification of cyclosporin A.⁵

References

1. Jurgensen, K.A., Koefoed-Nielsen, P.B., and Karamperis, N. Calcineurin phosphatase activity and immunosuppression. A review on the role of calcineurin phosphatase activity and the immunosuppressive effect of cyclosporin A and tacrolimus. *Scand. J. Immunol.* **57**(2), 93-98 (2003).
2. Vollenbroeker, B., Koch, J.H., Fobker, M., et al. Determination of cyclosporine and its metabolites in blood via HPLC-MS and correlation to clinically important parameters. *Transplant. Proc.* **37**(4), 1741-1744 (2005).
3. von Wartburg, A. and Traber, R. Cyclosporins, fungal metabolites with immunosuppressive activities. *Prog. Med. Chem.* **25**, 1-33 (1988).
4. Copeland, K.R., Yatscoff, R.W., and McKenna, R.M. Immunosuppressive activity of cyclosporine metabolites compared and characterized by mass spectroscopy and nuclear magnetic resonance. *Clin. Chem.* **36**(2), 225-229 (1990).
5. Kaiser, P., Akerboom, T., Wood, W.G., et al. A new approach for the determination of immunosuppressive drugs using HPLC-MS/MS and Cs^+ adducts. *Ger. Med. Sci.* **4**, 1-12 (2006).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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