

PRODUCT DATA SHEET

Cyclosporin H

Code: **BIA-C1248**

Pack sizes: 1 mg, 5 mg

Synonyms : 5-(N-methyl-D-valine)cyclosporine A

Specifications

CAS # : 83602-39-5 Molecular Formula : $C_{62}H_{111}N_{11}O_{12}$

Molecular Weight : 1202.6

Source : *Trichoderma* sp.

Appearance : White powder

Purity : > 95% by HPLC

Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Cyclosporin H is a minor analogue of the cyclosporin family which is immunologically inactive as it does not bind to immunophilin. Cyclopsorin H is the most extensively investigated of the minor cyclosporin analogues and displays a range of activities. It is a potent inhibitor of tumor-promoting phorbol esters on mouse skin *in vivo*, a potent inhibitor of calcium/calmodulin-dependent EF-2 phosphorylation *in vitro*, a potent and selective antagonist of formyl peptide receptor and inhibitor of formyl peptide-induced superoxide formation.

References

- 1. The weak immunosuppressant cyclosporine D as well as the immunologically inactive cyclosporine H are potent inhibitors in vivo of phorbol ester TPA-induced biological effects in mouse skin and of Ca2+/calmodulin dependent EF-2 phosphorylation in vitro. Gschwendt M. et al. BBRC 1988, 150, 545.
- 2. Differential inhibition of human neutrophil activation by cyclosporins A, D, and H. Cyclosporin H is a potent and effective inhibitor of formyl peptide-induced superoxide formation. Wenzel-Seifert K. et al. J. Immunol. 1991, 147, 1940.
- 3. Cyclosporin H is a potent and selective formyl peptide receptor antagonist. Comparison with N-t-butoxycarbonyl-L-phenylalanyl-L-leucyl-L-phenylalanyl-L-leucyl-L-phenylalanine and cyclosporins A, B, C, D, and E. Wenzel-Seifert K. & Seifert R. J. Immunol. 1993, 150, 4591.
- 4. Cyclosporin H is a potent and selective competitive antagonist of human basophil activation by N-formyl-methionyl-leucyl-phenylalanine. de Paulis A. et al. J. Allergy Clin. Immunol. 1996, 98, 152.