

PRODUCT INFORMATION



Microcystin-RR

Item No. 10007868

CAS Registry No.: 111755-37-4
Formal Name: cyclo[2,3-didehydro-N-methylalanyl-D-alanyl-L-arginyl-(3S)-3-methyl-D-β-aspartyl-L-arginyl-(2S,3S,4E,6E,8S,9S)-3-amino-9-methoxy-2,6,8-trimethyl-10-phenyl-4,6-decadienoyl-D-γ-glutamyl]

Synonyms: Cyanoginosin-RR, MC-RR

MF: C₄₉H₇₅N₁₃O₁₂

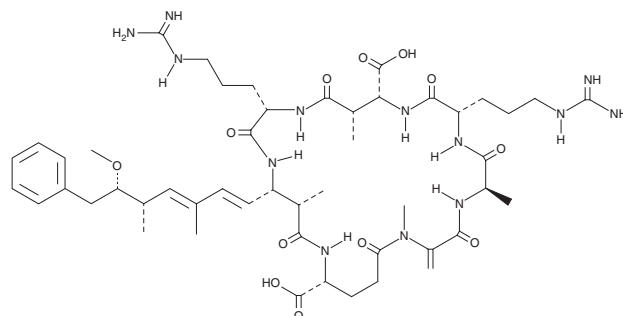
FW: 1038.2

Purity: ≥95%

Supplied as: A film

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

Microcystin-RR is supplied as a film. A stock solution may be made by dissolving the microcystin-RR in the solvent of choice, which should be purged with an inert gas. Microcystin-RR is soluble in the organic solvent methanol. It is also soluble in ethanol:water. We do not recommend storing the aqueous solution for more than one day.

Description

Microcystin-RR is a cyanotoxin and an inhibitor of protein phosphatase 1C (PP1C), PP1γ, and PP2A (K_is = 0.15, 0.24, and 0.018 nM, respectively).¹ Intratracheal administration of microcystin-RR (1,200 μg/kg) induces hepatic bleeding in mice. Microcystin-RR has been found in freshwater with cyanobacterial blooms.²

References

1. Ito, E., Takai, A., Kondo, F., *et al.* Comparison of protein phosphatase inhibitory activity and apparent toxicity of microcystins and related compounds. *Toxicon* **40**(7), 1017-1025 (2002).
2. Romera-García, E., Helmus, R., Ballesteros-Gómez, A., *et al.* Multi-class determination of intracellular and extracellular cyanotoxins in freshwater samples by ultra-high performance liquid chromatography coupled to high resolution mass spectrometry. *Chemosphere* **274**, 129770 (2021).

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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