

# Microcystin LR

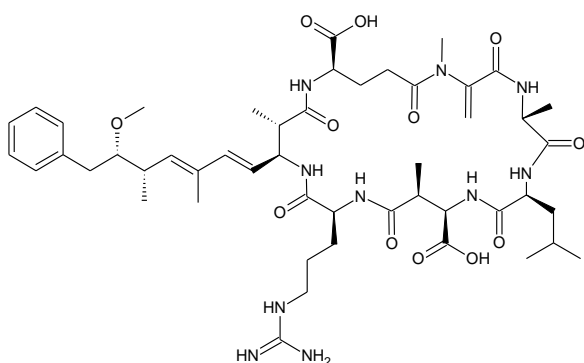
from *Microcystis aeruginosa*



## Analytical Standard

### Product Information

Cat. No.	Amount
MC-LR-a	1 mL (10 µg/mL)



### Product Specifications

<b>Molecular Formula</b>	C <sub>49</sub> H <sub>74</sub> N <sub>10</sub> O <sub>12</sub>
<b>Molecular Weight</b>	994.6 g/mol
<b>Purity</b>	>95 % (HPLC)
<b>Source</b>	<i>M. aeruginosa</i> strain
<b>Form</b>	solution of 10 µg/mL in methanol
<b>Shipping</b>	Ambient
<b>Long Term Storage</b>	- 20°C
<b>Shelf life</b>	24 months
<b>Stability</b>	The analytical standard should be used immediately after the vial is opened

### Description

Cyclic heptapeptide toxin isolated from the freshwater cyanobacterium *Microcystis aeruginosa*.<sup>1</sup>

The identity of the compound has been confirmed by NMR and MS/MS.

The analytical standard is dissolved in 100% methanol and ready to use for calibration. It is distributed in amber glass vials containing around 10 µg in 1 ml MeOH. The concentration of each lot is determined spectrophotometrically, confirmed by HPLC, and stated on the Certificate of Analysis.

### For research use only!

Not available for sale to end-users without signing an end-use-certificate as required by German and international law.

[1] Botes et al., Structural studies on cyanoginosins-LR, -YR, YA, and -YM, peptide toxins from *Microcystis aeruginosa*, *JCS Perkin Trans. I* 1985, 2747-2748

MacKintosh et al., Cyanobacterial microcystin-LR is a potent and specific inhibitor of protein phosphatases 1 and 2A from both mammals and higher plants, *FEBS Lett.* 1990, 187-192

Nishiwaki-Matsuhima et al., Liver tumor promotion by the cyanobacterial cyclic peptide toxin microcystin-LR, *Cancer Res. Clin. Oncol.* 1992, 420-424