

# Microcystin-WR

Microcystin-WR (MC-WR) is an analog of microcystin-LR (Prod. No. ALX-350-012) with Trp substituted in place of Leu. *May require a license for import, please [contact us](#) for more information.*

Cyanobacteria are photosynthetic prokaryotes mostly present in freshwater ecosystems. The increasingly frequent appearance of cyanobacteria blooms in lakes and rivers is linked to climate changes and human activities. Microcystins are a group of cyclic heptapeptide hepatotoxins produced by a number of cyanobacterial genera. The most notable of which, and namesake, is the widespread genus *Microcystis*. Structurally, all microcystins consist of the generalized structure cyclo(-D-Ala<sup>1</sup>-X<sup>2</sup>-D-MeAsp<sup>3</sup>-Y<sup>4</sup>-Adda<sup>5</sup>-D-Glu<sup>6</sup>-Mdha<sup>7</sup>-). X and Y are variable L-amino acids, D-MeAsp is D-erythro-β-methylaspartic acid and Mdha is N-methyldehydroalanine. Adda is the cyanobacteria unique C<sub>20</sub> β-amino acid 3-amino-9-methoxy-2,6,8-trimethyl-10-phenyl-deca-4,6-dienoic acid. Substitutions of the variable L-amino acids at positions 2 and 4 give rise to at least 21 known primary microcystin analogs and alterations in the other constituent amino acids result in more than 90 reported microcystins to date.

Citations: 18

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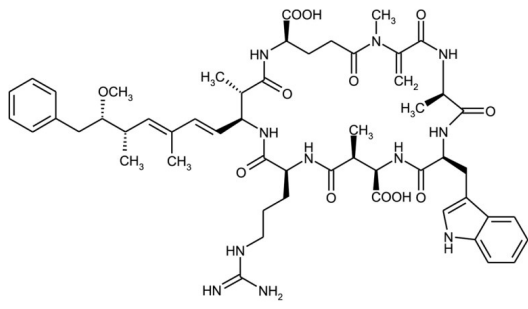
## Ordering Information

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ALX-350-167-M001	1mg
ALX-350-167-C025	25µg
ALX-350-167-C100	100µg

## Manuals, SDS & CofA

[View Online »](#)



## Handling & Storage

**Use/Stability** As indicated on product label or CoA when stored as recommended.

**Long Term Storage** -20°C

**Shipping** Ambient Temperature

**Regulatory Status** RUO - Research Use Only

## Product Details

<b>Alternative Name</b>	MC-WR
<b>Appearance</b>	Pale powder or film.
<b>CAS</b>	138234-58-9
<b>Formula</b>	$C_{54}H_{73}N_{11}O_{12}$
<b>Identity</b>	Identity determined by MS.
<b>MW</b>	1068.3
<b>Purity</b>	≥95% (HPLC)
<b>Solubility</b>	Soluble in DMSO or 100% methanol.
<b>Source</b>	Isolated from <i>Microcystis aeruginosa</i> .

Last modified: May 29, 2024



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