**Microcystin-WR**

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC-104-25</td>
<td>1 ml (25 µg/ml)</td>
</tr>
<tr>
<td>MC-104-100</td>
<td>4x 1 ml (25 µg/ml)</td>
</tr>
</tbody>
</table>

**Structural formula of Microcystin-WR**

*For in vitro use only!*

**Shipping:** shipped on blue ice  
**Storage Conditions:** store at -80 °C  
**Additional Storage Conditions:** avoid freeze/thaw cycles  
**Shelf Life:** 12 months  
**Molecular Formula:** C₅₄H₇₃N₁₁O₁₂  
**Molecular Weight:** 1068.22 g/mol  
**CAS#:** 138234-58-9  
**Purity:** 99 % (HPLC)  
**Form:** liquid (Supplied as 25 µg/ml solution containing in methanol)  
**Solubility:** methanol:water (1:1), methanol, DMSO

**Description:**  
Microcystins (MCs) are hepatotoxic cyclic heptapeptides, produced by various cyanobacterial species. MC’s cause adverse effects on freshwater systems with algae blooms. Microcystin WR contains tryptophane (W) in position 2 and arginine (R) in position 4. Microcystins are potent inhibitors of protein phosphatase types 1 and 2A (IC₅₀ value of MC-WR for inhibiting PP2A = 0.18 nM). No effects on protein kinases are known. MCs are known to be hepatic tumor promoters in experimental animal models.

**Source**  
cyanobacterial bloom

**Hazard**  
irritant, very toxic, may be carcinogenetic

**Toxicity**  
LC₅₀ 18.9 nM in human hepatocytes

**Selected References:**


