

Data Sheet

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Product Name : Microcystin-LR
Cat. No. : PC-47481
CAS No. : 101043-37-2
Molecular Formula : C₄₉H₇₄N₁₀O₁₂
Molecular Weight : 995.1716

Target : Protein Phosphatase/PTP Solubility : Ethanol:0.5 mg/ml

Biological Activity

Microcystin-LR (MC-LR) is a potent, selective inhibitor of protein phosphatase 2A (**PP2A**) with IC50 of 0.04 nM. Microcystin-LR completely inhibits PP2A without affecting PP1 when used at a concentration of 0.5 nM, at least 10 times more potent as serine/threonine PP inhibitors than okadaic acid; PP1 IC50 is about 1.7 nM. Microcystin-LR shows cytotoxic activity against pancreatic cancer cells.

Microcystin-LR also induces MMP-13 expression, promotes colorectal cancer invasion and migration.

References

Honkanen RE, et al. J Biol Chem. 1990 Nov 15;265(32):19401-4.

Kounnis V, et al. Anticancer Res. 2015 Nov;35(11):5857-65.

Miao C, et al. *Mol Carcinog*. 2016 May;55(5):514-24.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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