

Supplementary Materials: Effects of Modification of Light Parameters on the Production of Cryptophycin, Cyanotoxin with Potent Anticancer Activity, in *Nostoc* Sp.

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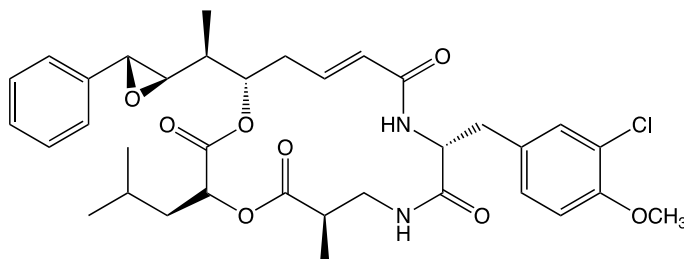


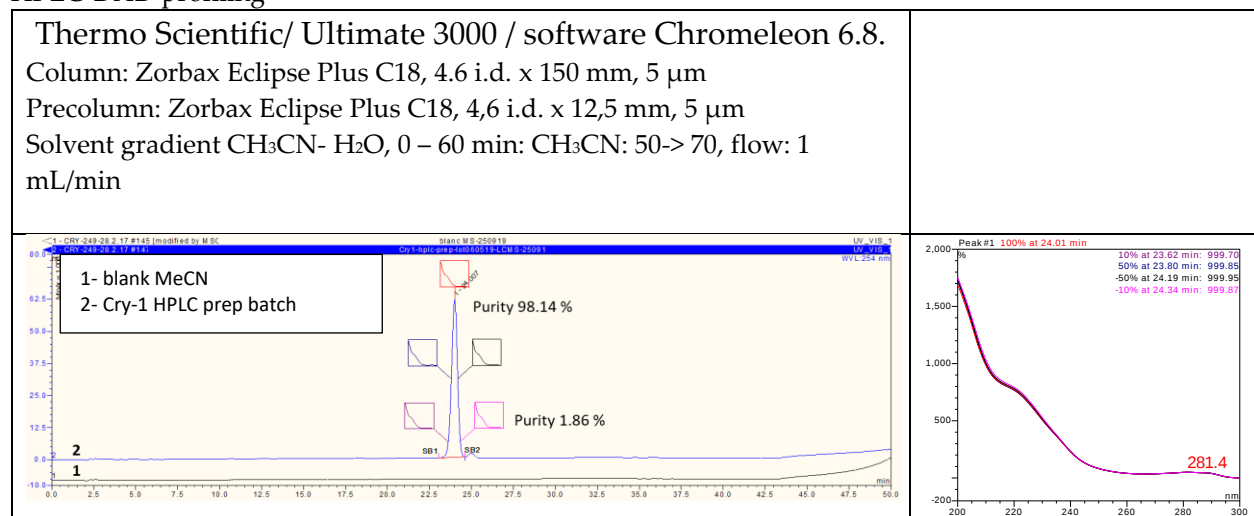
Figure S1. Structure of cryptophycin 1.

HRMS:

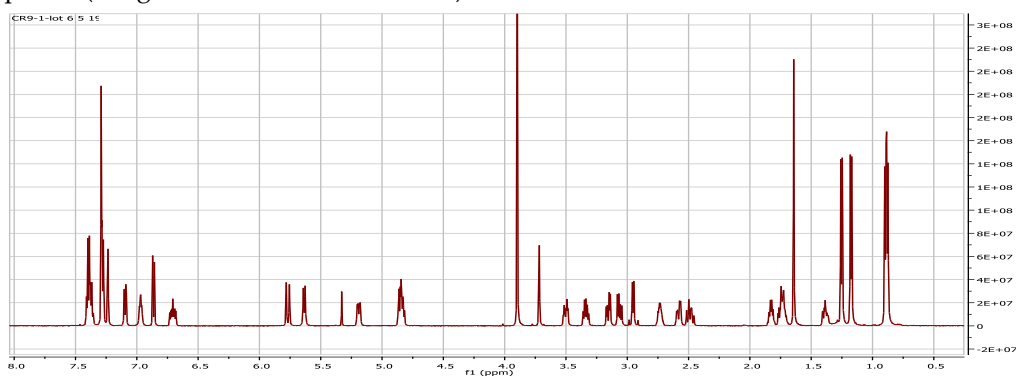
$C_{35}H_{44}ClN_2O_8$ $[M+H]^+$:

Exact mass m/z : 655.277709 measured, m/z : 0.655.276070 calc., error -0,6 ppm

HPLC-DAD profiling



1H NMR spectra (5 mg/0,7 mL $CDCl_3$ – 600 MHz)



^{13}C NMR spectra (5 mg/0,7 mL CDCl_3 – 400 MHz)

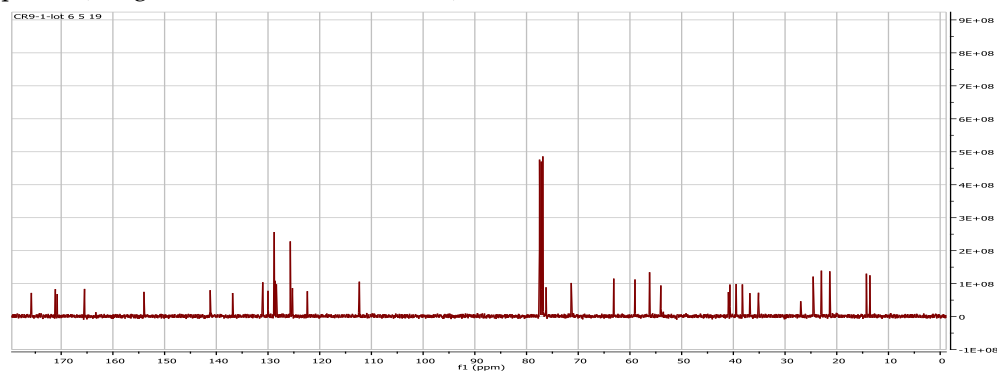
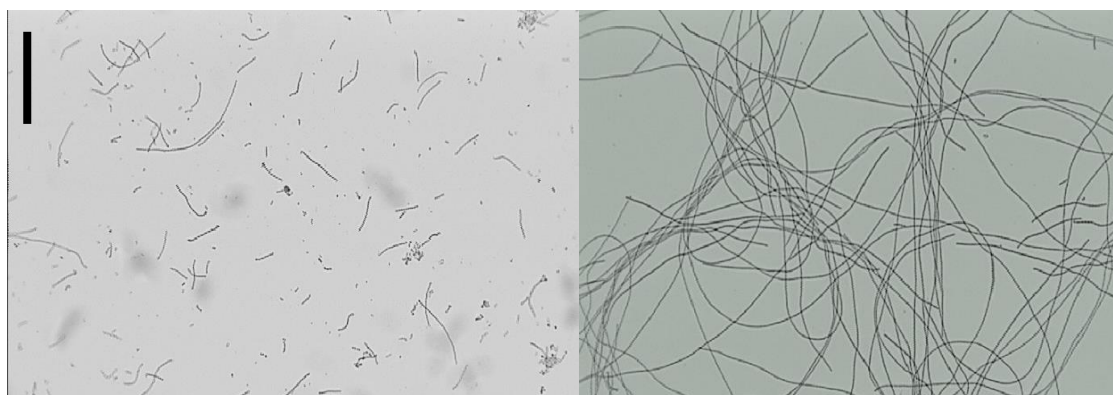
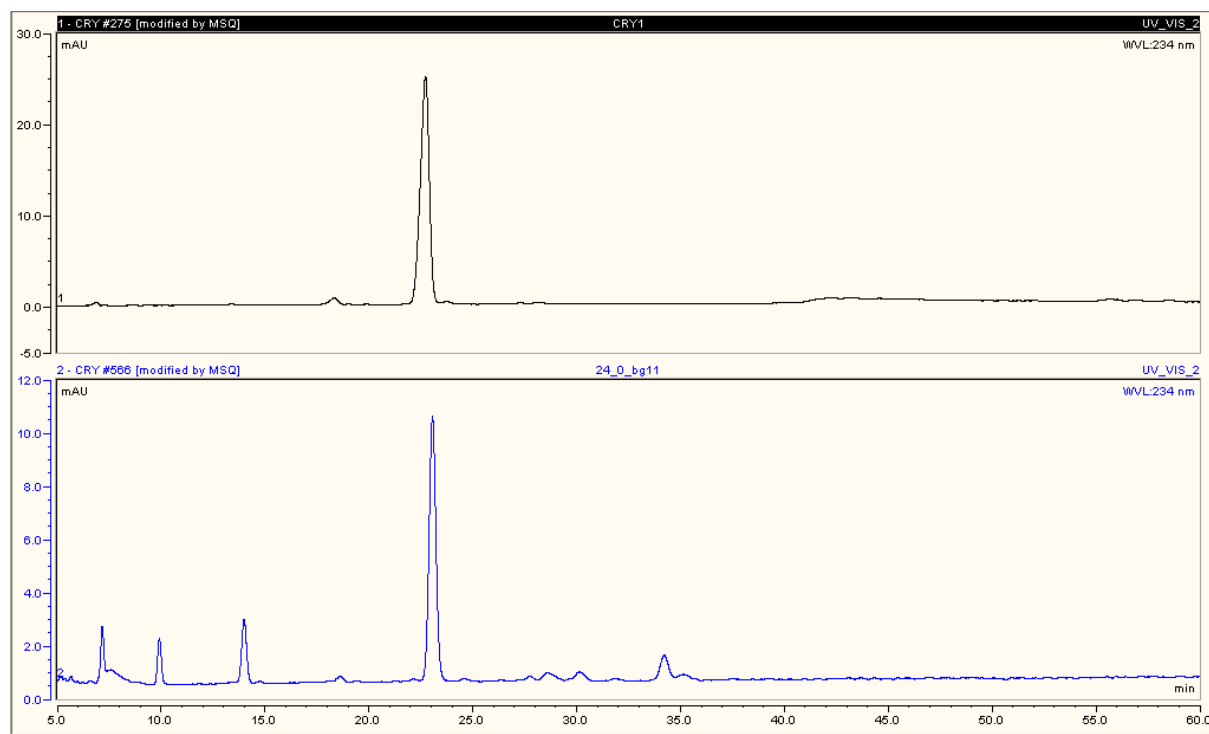


Figure S2. Cryptophycin-1 standard.



.1Fragments of filaments of *Nostoc* sp. ATCC 53789 after photoinhibition at 200 (left pannel), filaments of *Nostoc* sp. ATCC 53789 at 80. The line is 1.9 mm. (microscopic observation using Motic Finite optical Microscope B1-220E-SP)

Figure S3. Microscopic observation of *Nostoc* sp. ATCC 53789.



Comparative chromatogram of cryptophycin -1 standard (upper pannel) and crude extract of *Nostoc* sp. ATCC 53789. The crude extract is from the experiment of photoperiod, from the set of 24:0 (L:D). The chromatogrm is focused on 5.0-60.0 min to present the part related to cryptophycin. (For conditions see materials and methods)

Figure S4. Comparative chromatogram of cryptophycin-1 and crude extract.