New Spumigin Analogues from a Cyanobacterium Dolichospermum sp.

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Keywords: Cyanobacterium; *Dolichospermum*; Natural products; Spumigins; Biosynthetic gene cluster

Cyanobacteria produce lots of biological active secondary metabolites such as antibacterial, antiviral, antifungal, anticancer, immunosuppressive, and protease inhibitory activities. ¹⁻⁴ Spumigins are characterized as linear peptide of four units. ⁵ Our previous study showed spumigins A and J possessed thrombin and cathepsin B inhibitory activities. ⁵ Our present study of a cyanobacterium *Dolichospermum* sp. has led to the isolation of two new spumigin analogues. The NaBH₄ reduction enabled the purification of reduced spumigins by HPLC. Surprisingly, these spumigins have a rare feature of three units compared to known spumigins with four units.

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