

Anachelin, the Siderophore of the Cyanobacterium *Anabaena cylindrica* CCAP 1403/2A[#]

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A catecholate siderophore – anachelin – has been isolated from the cyanobacterium *Anabaena cylindrica* CCAP 1403/2A. The central part of the siderophore is a tripeptide consisting of L-Thr, D-Ser and L-Ser. Its C-terminus is linked amidically to a 1,1-dimethyl-3-amino-1,2,3,4-tetrahydro-7,8-dihydroxyquinolinium system and its N-terminus to 6-amino-3,5,7-trihydroxyheptanoic acid. The 7-hydroxyl group of the latter is esterified with salicylic acid whose carboxyl group is condensed with the 6-amino group to an oxazoline ring. Anachelin is the first genuine siderophore of a cyanobacterium whose structure has been elucidated.