Can the Peptide Chain of a Pyoverdin be Bound by an Ester Bond to the Chromophore? – The Old Problem of Pseudobactin 7SR1§

Werner Voßen, Regine Fuchs, Kambiz Taraz and Herbert Budzikiewicz*

Institut für Organische Chemie der Universität zu Köln, Greinstr. 4, D-50939 Köln, Germany. Fax: +49-221-470-5057, E-mail: h.budzikiewicz@uni-koeln.de

* Author for correspondence and reprint requests

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The structure which had been proposed for the pyoverdin named pseudobactin 7SR1 (Yang and Leong, 1984) differed from those of all other pyoverdins investigated sofar: its peptide chain was supposedly linked to the chromophore not by an amide bond originating from its N-terminal amino acid, but rather by an ester bond involving one of the three Ser. It will be shown that the peptide chain of pseudobactin 7SR1 is actually bound to the chromophore amidically by its N-terminal Ser and that it comprises a *cyclo*depsipeptidic substructure with an ester bond between the C-terminal Thr and the OH-group of the second Ser in the chain.