Complexation of Organic Dyes by Peptides Built of Lysine and Glutamic Acid Amides

Heinz Mehlmann, Daniel Olschewski, Andrey Olschewski, and Martin Feigel
Fakultät für Chemie, Ruhr-Universität Bochum, Universitätsstr. 150, D-44780 Bochum

Reprint requests to Prof. Dr. M. Feigel. Fax: +49(0)2343214497.
E-mail: feigel@indi-f.nsc.ruhr-uni-bochum.de

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Two amide libraries, Fmoc-[Lys(ac$_i$)$_4$-Gly-resin (1) (ac$_i$ = 2-naphthylcarbonyl, 1-adamantylcarbonyl and benzoxycarbonyl) and Fmoc-[$\delta$-Glu(amide$_i$)$_4$-Gly-resin (2) (amide$_i$ = morpholineamide, piperidineamide, (N$_i$/H$_{11032}$-phenyl)-piperazineamide), have been synthesized from the corresponding Fmoc-protected amino acid derivatives. Beads of the libraries complex organic dyes (crystal violet and Sudan black) differently according to the sequence of residues in 1 or 2. The results are considered a step towards artificial receptors for small organic molecules build from linear oligoamides.