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5-[p-(1-L-Phenylalanyloxy)ethoxyl]phenyl-10,15,20-triphenylporphyrin

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5-[*p*-(2-Bromo-1-ethoxy)]phenyl-10,15,20-triphenylporphyrin (1) was prepared by previously published method [1]. L-phenylalanine was chrom. pure. Chloroform (A.R. grade) was dried with P₂O₅ and distilled before use. Silica gel was C.P. grade (10-40 m). Other reagents were A.R. grade chemicals as supplied. The mixture of 1 (0.27mmol), L-phenylalanine (2.42mmol), BTEAC (25mg) and anhydrous potassium carbonate (4g) was stirred in DMF (50ml) at room temperature for 72 hours. Reaction mixture was then poured into saturated NaCl solution (150ml). The precipitate was filtered and washed several times with water. Product was then purified by means of chromatography on silica gel with chloroform as an eluent. Purple solid 5-[*p*-(1-L-phenylalanyloxy)ethoxyl]phenyl-10,15,20-triphenylporphyrin (2) was obtained, 0.122g. Yield: 55%.

IR (KBr): 3322.8, 3056.7, 3027.7, 2923.6, 2854.2, 2705.7, 2605.4, 2534.0, 1814.7, 1737.6 (C=O), 1631.5, 1602.6, 1562.1, 1506.2, 1471.4, 1442.5, 1402.0, 1349.9, 1284.4, 1243.9, 1222.7, 1178.3, 1112.7, 1074.2, 966.2, 929.5, 846.6, 800.3, 734.8, 702.0, 648.0, 555.4, 528.4.

UV-Vis 1_{max} (nm): 419.1, 516.1, 551.3, 591.5, 648.5.

¹H-NMR (CDCl₃): -2.77 (s, 2H, pyrrole NH), 1.75 (br. s, 2H, -NH₂), 3.06 (m, 1H, CH₂), 3.21 (m, 1H, CH₂), 3.91 (t, 1H, C*H), 4.40 (m, 2H, -CH₂-), 4.65 (m, 2H, -CH₂-), 7.24-8.22 (several m, 24H, Ph-H), 8.85 (m, 8H, pyrrole b-H).

FAB-MS ([M+1]⁺): 822.

Anal. calc. for C55H43N5O3 (821): C 80.39, H 5.24, N 8.53; found: C 80.21, H 5.13, N 8.46.

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Reference

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1. Ji, L.-N.; Qin, X.; Huang, J.-W. Acta Scientiarum Natruralium Universitatis Sunyatseni 1993, 32 (2), 1

Sample Availability: Available from the authors and from MDPI. MDPI 17056.

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