Supporting Information for:

Selective Recognition of Bacterial Membranes by Zinc(II)-Coordination Complexes

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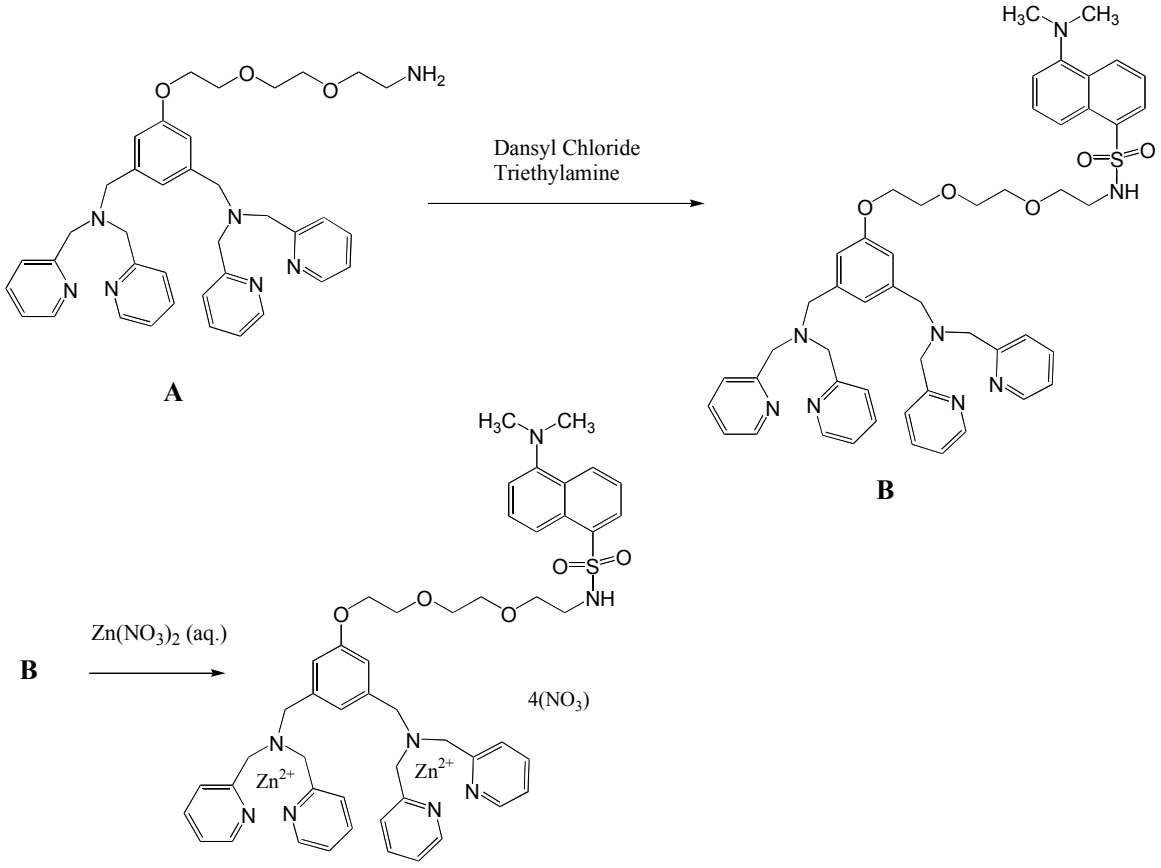
Synthesis of 2



The known amine **A**[1] (171 mg, 0.27 mmol) was dissolved in dry CH_2Cl_2 and cooled to 0 °C in an ice bath. Triethylamine (377 mg, 3.74 mmol) and dansyl chloride (72 mg, 0.27 mmol) were added and the solution stirred under a nitrogen atmosphere overnight, coming to room temperature as the ice bath melted. The reaction mixture was washed with brine and dried using sodium sulfate. The mixture was then concentrated by rotary evaporation and purified on a neutral alumina column using $CHCl_3$ elution to yield the free ligand **B** (160.2 mg, 0.182 mmol) in 68% yield. Compound **B** was dissolved in methanol and mixed with an aqueous solution of $Zn(NO_3)_2$ (2.1 eqs.) to afford the zinc complex, **2**.

Spectral Data for Free Ligand **B**

^{1}H NMR (300 MHz, DMSO): δ 2.77 (2, 6 H), 2.95 (q, *J* = 5.7 Hz, 2 H), 3.29 (t, *J* = 5.4 Hz, 4 H), 3.37 (t, *J* = 6.3 Hz, 2 H), 3.57 (s, 4 H), 3.69 (bs, 10 H), 4.01 (t, *J* = 3.9 Hz, 2 H), 5.55 (bs, 1H), 6.82 (s, 2 H), 7.07 (s, 1 H), 7.22 (m, 4 H), 7.57 (q, *J* = 7.8 Hz, 6 H), 7.72 (dt, J_1=7.8 Hz, J_2=1.8 Hz, 4 H), 8.03 (t, *J* = 5.4 Hz, 1 H), 8.1 (d, *J* =7.5 Hz, 1 H), 8.29 (d, *J* =8.7 Hz, 1 H), 8.41 (d, *J* =8.7 Hz, 1 H), 8.47 (d, *J* =4.2 Hz, 4 H). ^{13}C NMR (75 MHz, DMSO) 42.23, 45.02, 57.41, 59.15, 66.85, 68.85, 68.97, 69.47, 69.62, 79.17, 113.21, 115.05, 119.27, 120.96, 122.14, 122.34, 123.55, 127.73, 128.01, 129.03, 129.06,129.25, 136.37, 136.52, 140.2, 148.81,

151.27, 158.36, 159.14. Mass Spec. (FABMS): Calc. for $C_{50}H_{56}N_8O_5S$, 881, found [881]+.

1. C. Lakshmi, R. G. Hanshaw, and B. D. Smith, *Tetrahedron*, **60**, 2004, 11307.

Microscopy Details

Blue Field: (Exciter: D360/40x, Dichroic: 400DCLP, Emitter: 460/50m)

Green Field: (Exciter: D360/40X, Dichroic: 400DCLP, Emitter: HQ535/50m)

Red Field: (Exciter: HQ545/30x, Dichroic: Q570LP, Emitter: HQ610/75m)