Rotaxane-type resorcinarene tetramers as a histone-sensing fluorescent receptor

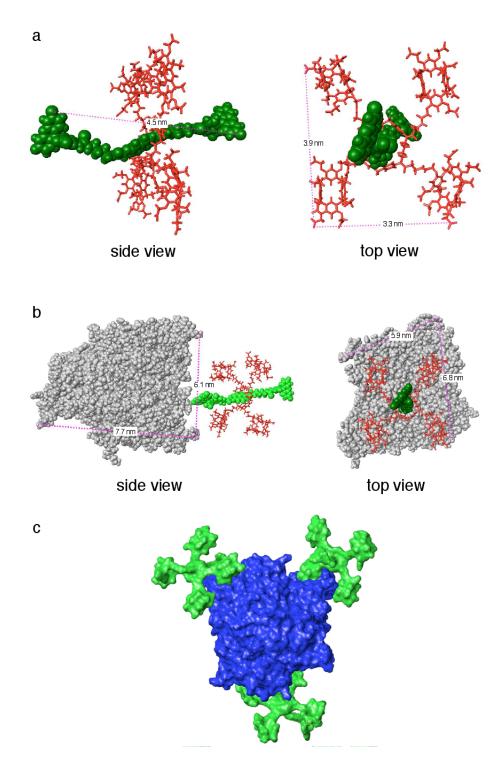
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Table of Contents	Page:
Computer-generated CPK models	S2
Concentration dependency of fluorescence spectra	<b>S</b> 3
Fluorescence titration experiments with other proteins	<b>S</b> 4
FRET titration experiments with other proteins	<b>S</b> 5



**Figure S1**. Computer-generated CPK models for **1** (a) and **1**-histone complexes (b), and surface geometry for 3:1 complex of **1** with histone.

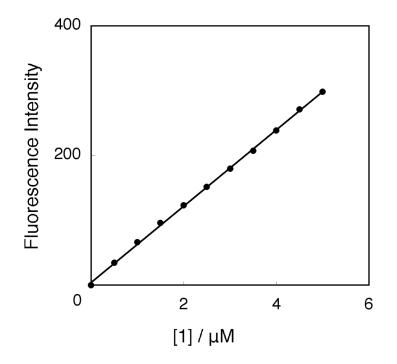
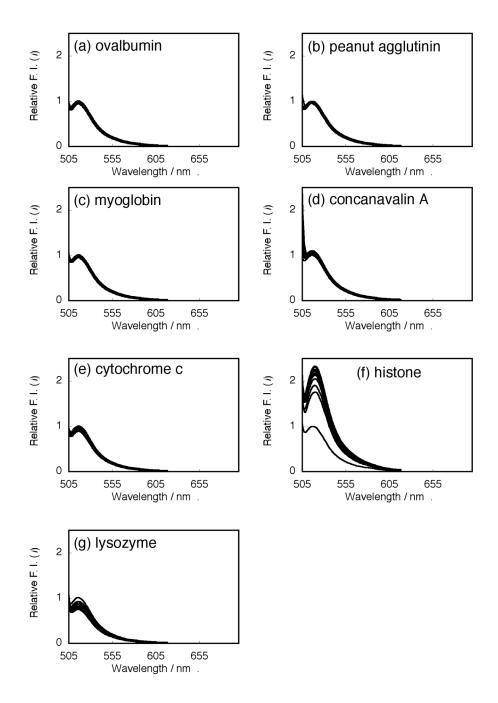
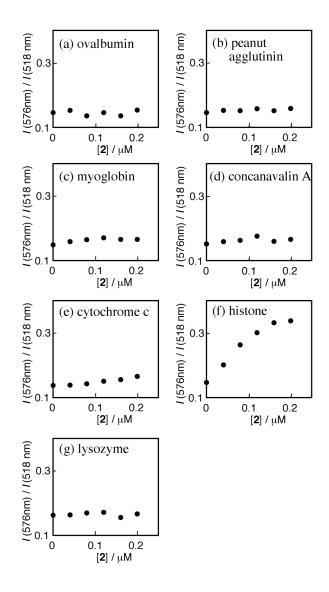


Figure S2. A correlation of the fluorescence intensity at 518 nm with [1].



**Figure S3**. Fluorescence spectral changes for aqueous solution of **1** (0.1  $\mu$ M) upon addition of ovalbumin (a), peanut agglutinin (b), myoglobin (c), concanavalin A (d), cytochrome c (e), histone (f), and lysozyme (g) in HEPES (0.01 M, pH 7.4, with 0.15 M NaCl) at 298K; [protein] = 0, 0.3, 0.6, 0.9, 1.2, 1.5, 1.8, 2.1, 2.4, 2.7, and 3.0  $\mu$ M. Ex, 488 nm.



**Figure S4.** Titration curves of the fluorescence spectral changes for an aqueous solution containing **1** (0.2  $\mu$ M) and individual proteins (0.6  $\mu$ M) upon addition of **2**, [**2**] = 0, 0.04, 0.08, 0.12, 0.16, and 0.20  $\mu$ M. Ex, 430 nm. ovalbumin (a), peanut agglutinin (b), myoglobin (c), concanavalin A(d), cytochrome c (e), histone (f), and lysozyme (g).