

SUPPLEMENTARY MATERIAL

I. Color and Visual Fluorescence Changes of PBI-1 and PBI-2

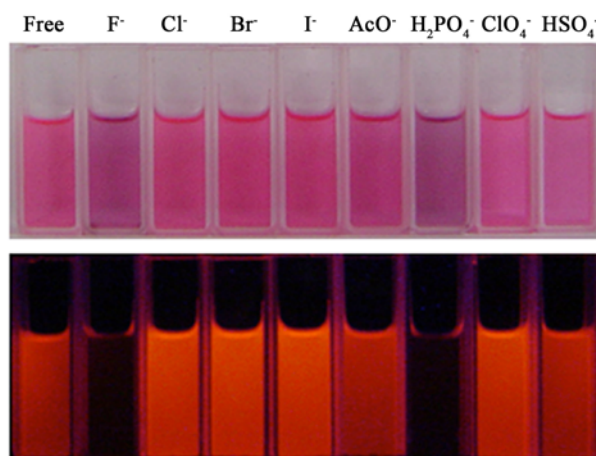


Fig. (S1). Color changes of PBI-1 (30 μ M) and visual fluorescence changes of PBI-1 (30 μ M) under a UV lamp (365 nm) upon addition of 2 equiv of tetrabutylammonium salts of F^- , Cl^- , Br^- , I^- , AcO^- , $H_2PO_4^-$, ClO_4^- and HSO_4^- in CH_3CN .

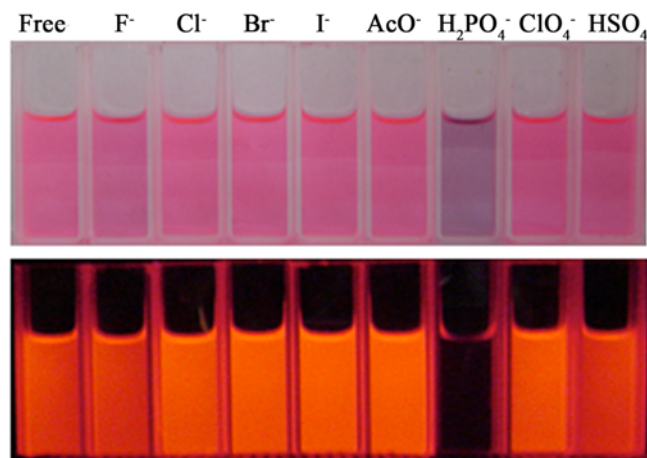


Fig. (S2). Color changes of PBI-2 (30 μ M) and visual fluorescence changes of PBI-2 (30 μ M) under a UV lamp (365 nm) upon addition of 2 equiv of tetrabutylammonium salts of F^- , Cl^- , Br^- , I^- , AcO^- , $H_2PO_4^-$, ClO_4^- and HSO_4^- in CH_3CN .

II. Fluorescent Titrations of Sensors PBI-1 and PBI-2

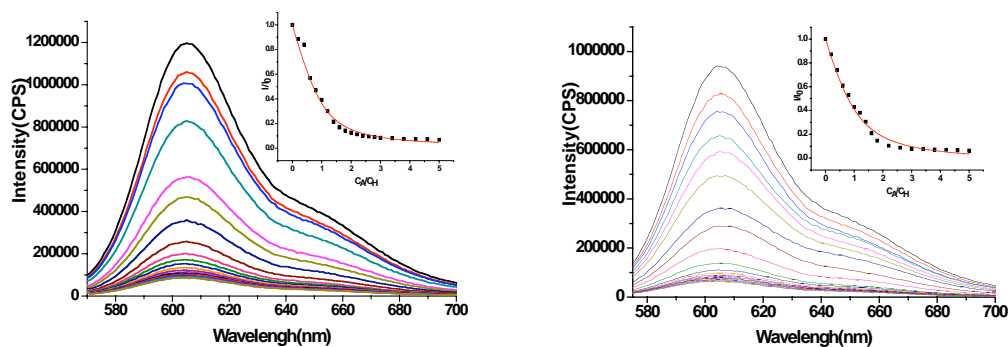


Fig. (S3). Fluorescent titrations of PBI-1 (10 μ M) with tetrabutylammonium salts of F^- (left) and $H_2PO_4^-$ (right) in CH_3CN ($\lambda_{ex} = 568$ nm, slit = 1.5 nm), the equivalents of anions were 0-5 respectively. Inset: the corresponding nonlinear curve fitting.

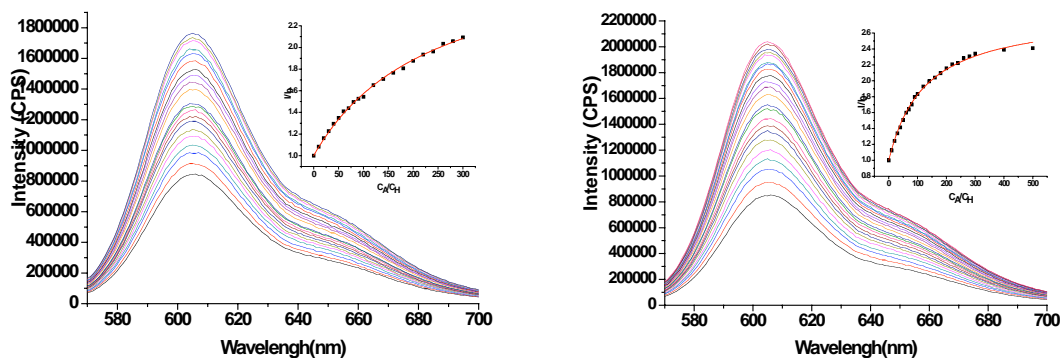


Fig. (S4). Fluorescent titrations of PBI-1 (10 μ M) with tetrabutyl ammonium salts of Cl^- (left) and Br^- (right) in CH_3CN ($\lambda_{\text{ex}} = 568$ nm, slit = 1.5 nm), the equivalents of anions were 0-300 for Cl^- , and 0-500 for Br^- , respectively. Inset: the corresponding nonlinear curve fitting.

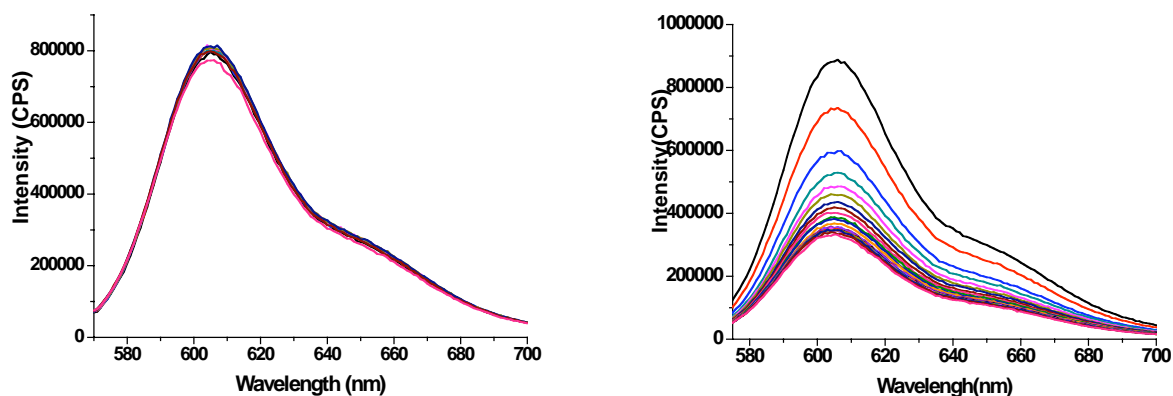


Fig. (S5). Fluorescent titrations of PBI-1 (10 μ M) with tetrabutyl ammonium salts of I^- (left) and CH_3COO^- (right) in CH_3CN ($\lambda_{\text{ex}} = 568$ nm, slit = 1.5 nm), the equivalents of anions were 0-100 respectively.

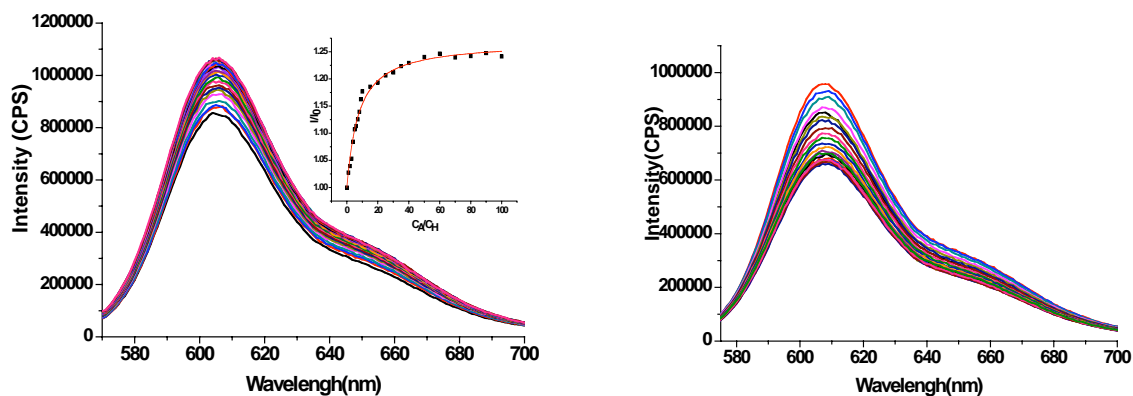


Fig. (S6). Fluorescent titrations of PBI-1 (10 μ M) with tetrabutyl ammonium salts of ClO_4^- (left) and HSO_4^- (right) in CH_3CN ($\lambda_{\text{ex}} = 568$ nm, slit = 1.5 nm), the equivalents of anions were 0-100 respectively. Inset: the corresponding nonlinear curve fitting.

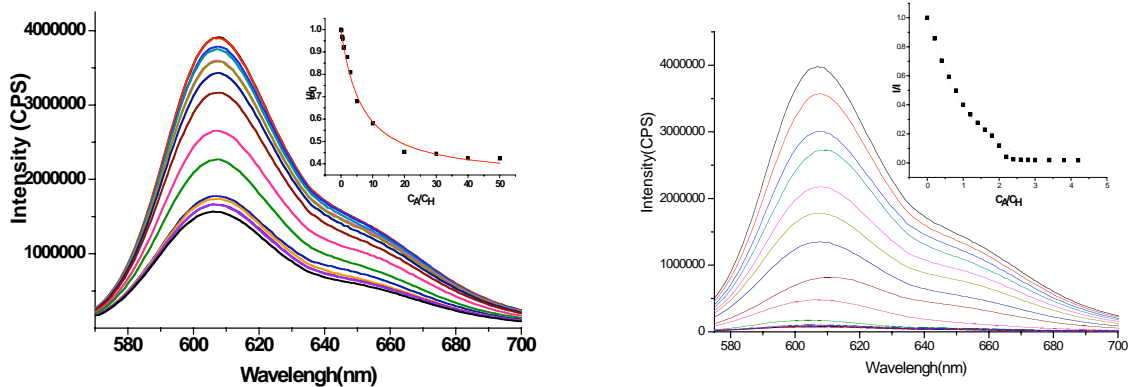


Fig. (S7). Fluorescent titrations of PBI-2 (10 μM) with tetrabutyl ammonium salts of F⁻ (left) and H₂PO₄⁻ (right) in CH₃CN (λ_{ex} = 568 nm, slit = 1.5 nm), the equivalents of anions were 0-50 for F⁻ and 0-5 for H₂PO₄⁻ respectively. Inset: the corresponding nonlinear curve fitting.

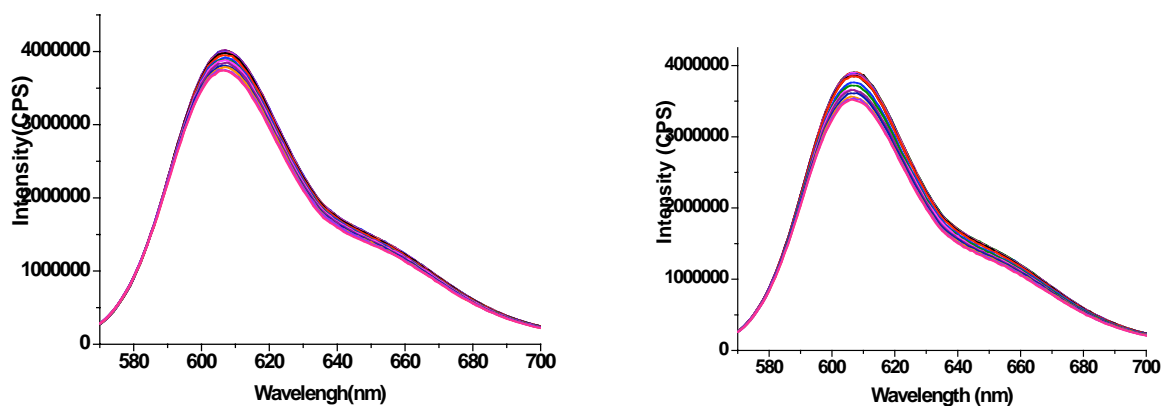


Fig. (S8). Fluorescent titrations of PBI-2 (10 μM) with tetrabutyl ammonium salts (0-100 eq) of Cl⁻ (left) and Br⁻ (right) in CH₃CN (λ_{ex} = 568 nm, slit = 1.5 nm).

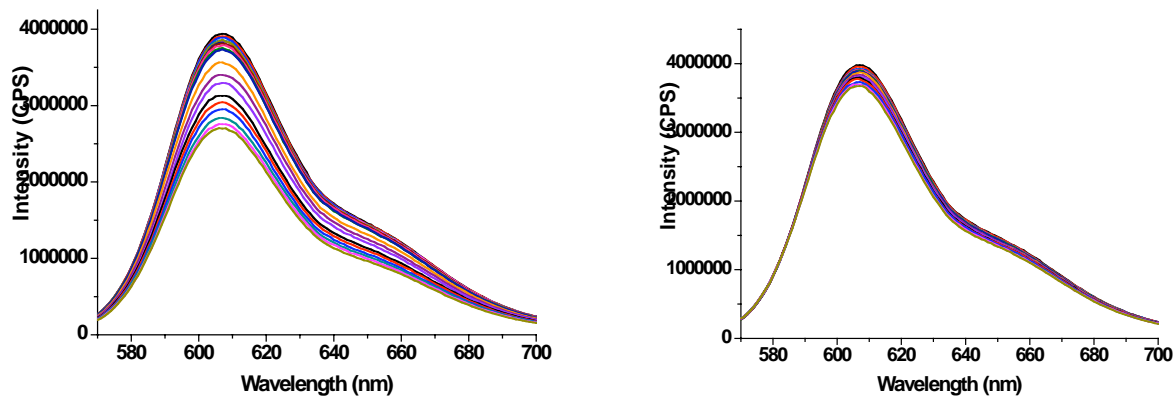


Fig. (S9). Fluorescent titrations of PBI-2 (10 μM) with tetrabutyl ammonium salts (0-100 eq) of I⁻ (left) and CH₃COO⁻ (right) in CH₃CN (λ_{ex} = 568 nm, slit = 1.5 nm).

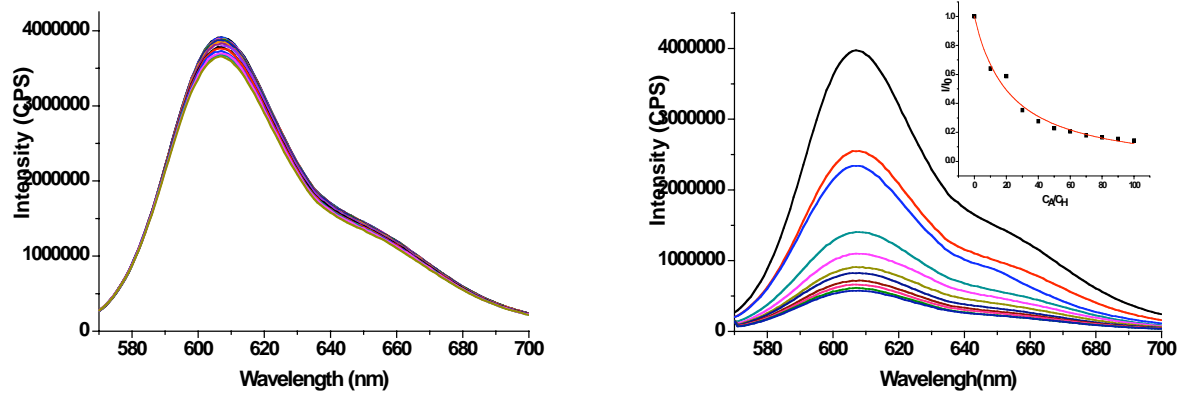


Fig. (S10). Fluorescent titrations of PBI-2 (10 μM) with tetrabutyl ammonium salts (0-100 eq) of ClO₄⁻ (left) and HSO₄⁻ (right) in CH₃CN (λ_{ex} = 568 nm, slit = 1.5 nm). Inset: the corresponding nonlinear curve fitting.