Supporting Information

A FRET-based fluorescent approach for labetalol sensing using calix[6]arene functionalized MnO_2@graphene as receptor

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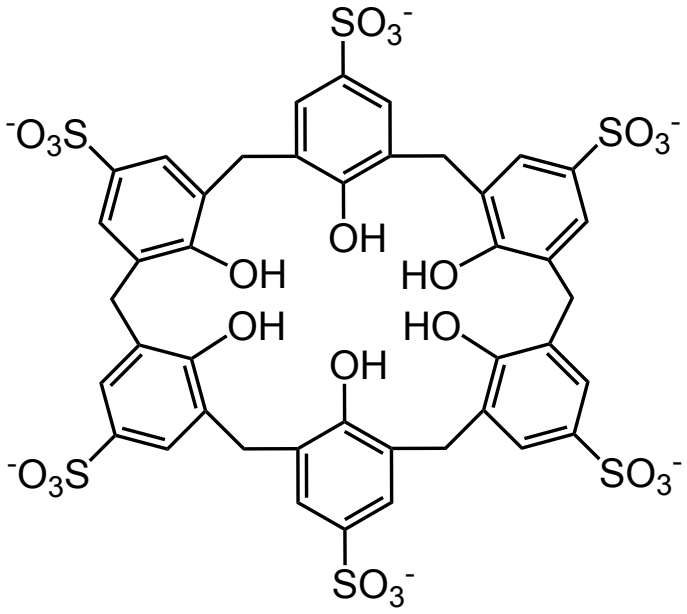

Fig. S1 The chemical structure of SCX6.

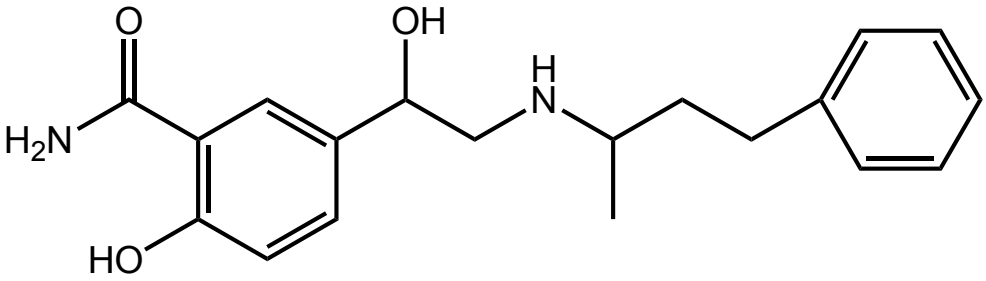

Fig. S2 The chemical structure of labetalol.

Fig. S3 The photograph of SCX6–MnO_2@RGO aqueous dispersion (1.0 mg mL^{-1}) after being stored for 6 months.

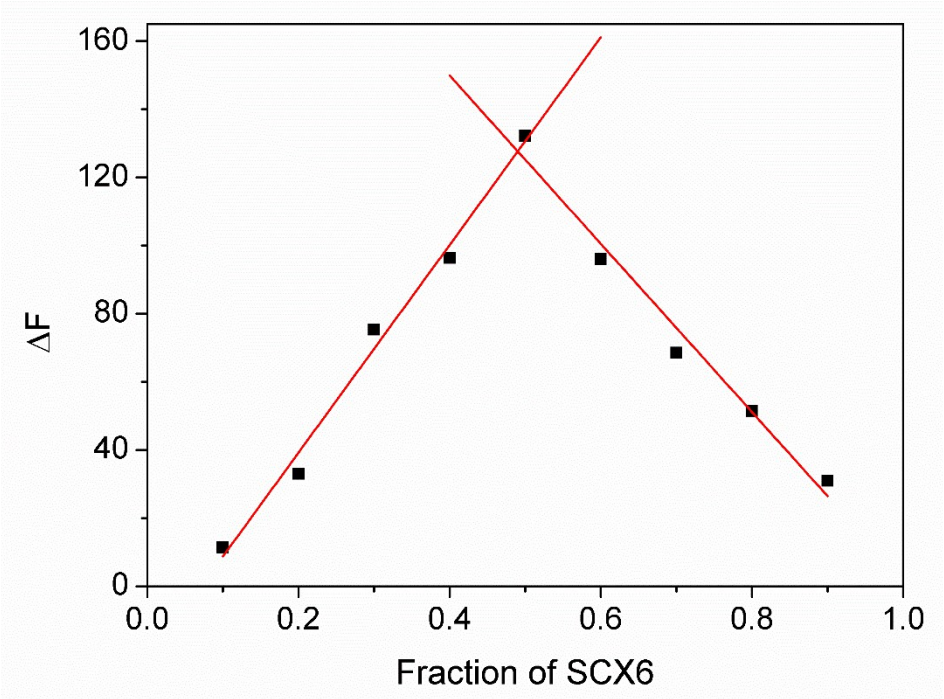

Fig. S4 Job's continuous variation plot of the SCX6/labetalol complex.

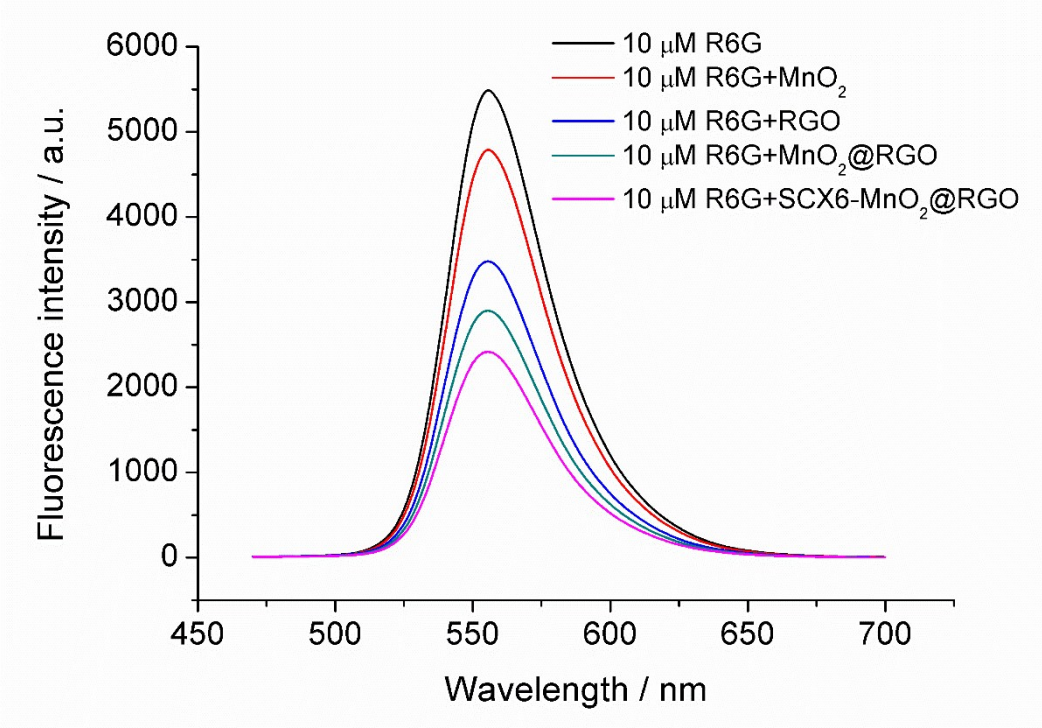

Fig. S5 Fluorescence spectra of 10 μM R6G in the absence and presence of 1 μg mL^{-1} MnO_2, RGO, MnO_2@RGO, and SCX6–MnO_2@RGO.

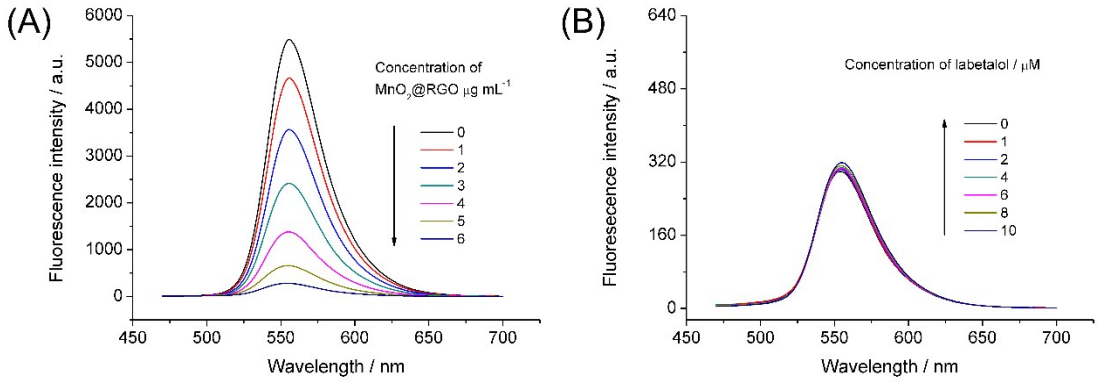

Fig. S6 (A) The effect of increasing concentrations of MnO_2@RGO (concentrations ranging from 0 to 6 μg mL^{-1}) on the fluorescence intensity of R6G (λex = 490 nm). R6G concentration was 10 μM. **(B)** Fluorescence spectra of the MnO_2@RGO·R6G complex via different concentrations of labetalol. R6G and MnO_2@RGO concentrations were 10 μM and 6 μg mL^{-1}, respectively. The combined solution was mixed by vortexing well for 5 min and then tested.