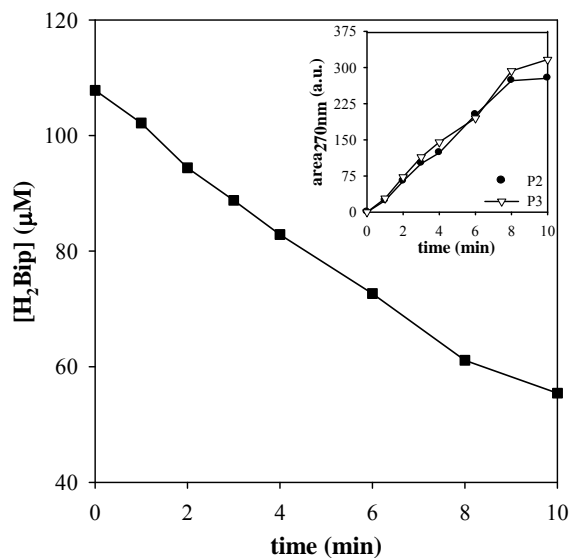
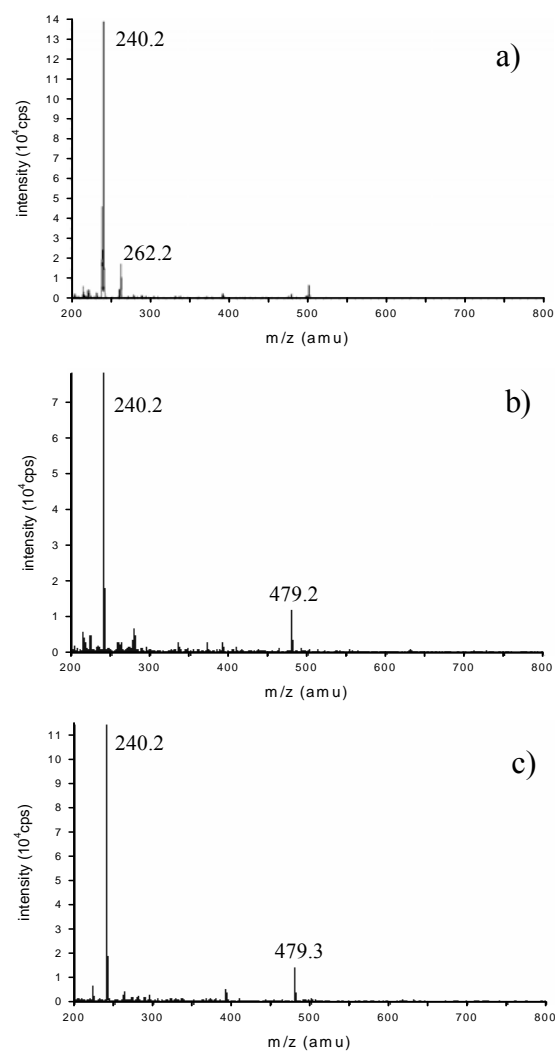


## ELECTRONIC SUPPLEMENTARY INFORMATION (ESI)



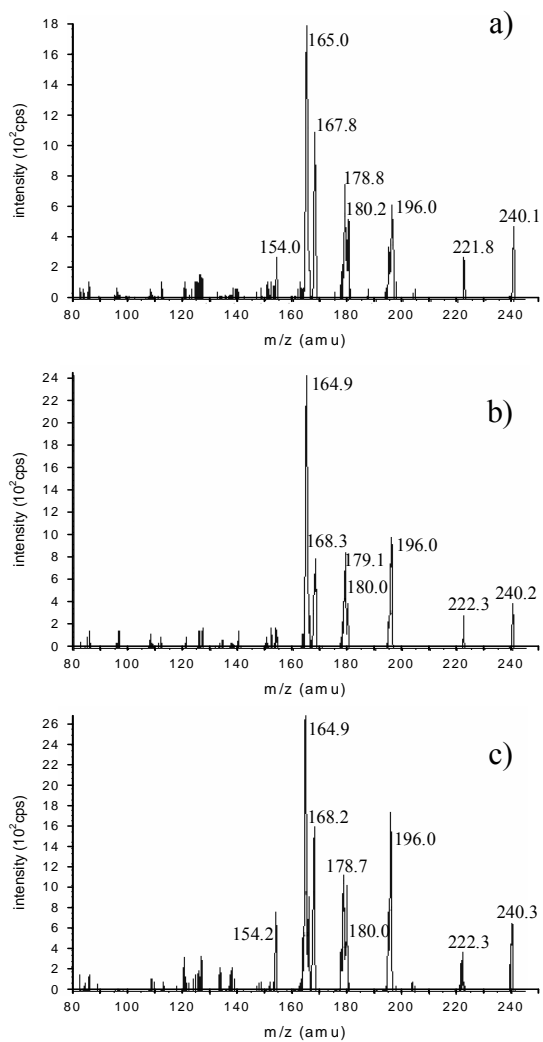
**Figure S1.**

Time evolution of H<sub>2</sub>Bip concentration by HPLC analysis in Ar-saturated aqueous solutions under UV-A irradiation. Inset: Time evolution of the areas of chromatographic peaks corresponding to photoproducts P2 and P3. [H<sub>2</sub>Bip]<sub>0</sub> = 110 μM, pH = 7.0. Experiments performed using irradiation source I (350 nm) and chromatographic system I (Experimental).



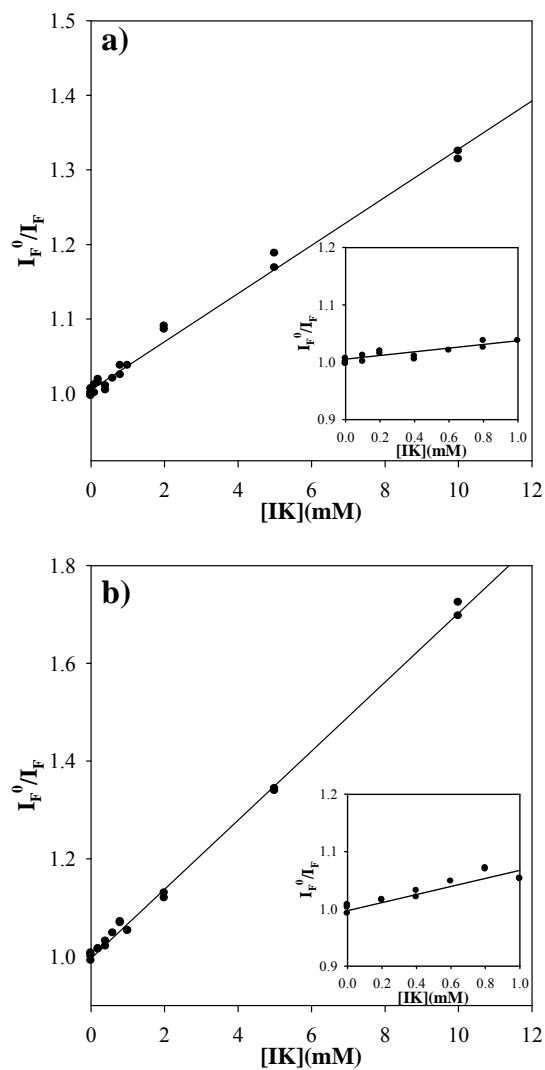
**Figure S2.**

Electrospray ionization mass spectra of H<sub>2</sub>Bip solutions ( $[H_2Bip]_0 = 150 \mu M$ , pH = 7.0) irradiated in anaerobic conditions. Analysis carried out in positive mode. a) H<sub>2</sub>Bip. b) Product P2. c) Product P3. 60 min of UV exposure at 335 nm using irradiation source II.



**Figure S3.**

MS/MS spectra obtained in  $ESI^+$  mode. a)  $H_2Bip$ . b) Product P2. c) Product P3.



**Figure S4.**

Quenching of the fluorescence of  $H_2Bip$  and  $Bip$  by  $I^-$ . Stern-Volmer plots of the fluorescence intensities ( $I_F$ ). pH = 7.0. a)  $H_2Bip$  (25  $\mu M$ ),  $\lambda_{exc} = 335$  nm. b)  $Bip$  (25  $\mu M$ ),  $\lambda_{exc} = 350$  nm. Insets: Detail of Stern-Volmer plots at low  $I^-$  concentrations.