Formulation of Photo-cleavable Liposomes and Mechanism of Their Content Release

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Figure S1. Time dependent spectral changes upon irradiation of Asp-lipid at 365 nm. The difference spectra (i.e., spectra at different time intervals minus the zero time spectrum) are shown just below the main spectra. The time slices of the spectral changes are shown on right, and the solid smooth lines are the best fit of the data according to the single exponential rate equation.
Figure S2. Spectral and kinetic profiles for the release of carboxyfluroscein upon irradiation of liposomes containing Asp-lipid at 365 nm. The change in fluorescence intensity (ΔF 520 nm) as a function of time (open circle). The control experiment (solid triangle) was performed without irradiating the liposomes. The solid smooth line of the photo-cleavage of liposome is the best fit of the data according to the model of Eq. 2 with k₁ and k₂ values of 0.037 min⁻¹ and 0.019 min⁻¹, respectively.
Figure S3. Spectral and kinetic profiles for the release of carboxyfluroscein upon irradiation of liposomes containing Lys-lipid at 365 nm. The change in fluorescence intensity (ΔF_{520} nm) as a function of time (open circle). The control experiment (solid triangle) was performed without irradiating the liposomes. The solid smooth line of the photo-cleavage of liposome is the best fit of the data according to the model of Eq. 2 with k₁ and k₂ values of 0.026 min⁻¹ and 0.025 min⁻¹, respectively.
Figure S4: Transmission electron micrograph of liposomes prepared by incorporating Glu-lipid as a minor component. The average size of the liposomes was calculated to be 60-70 nm.