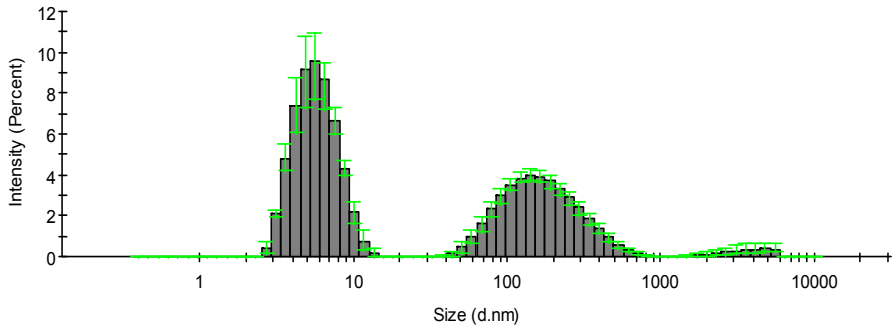
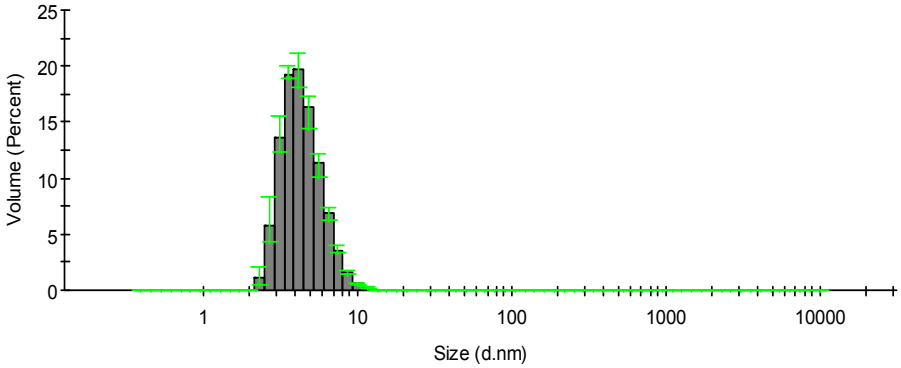
SUPPORTING INFORMATION

SUPPLEMENTARY FIGURES

A



B



C

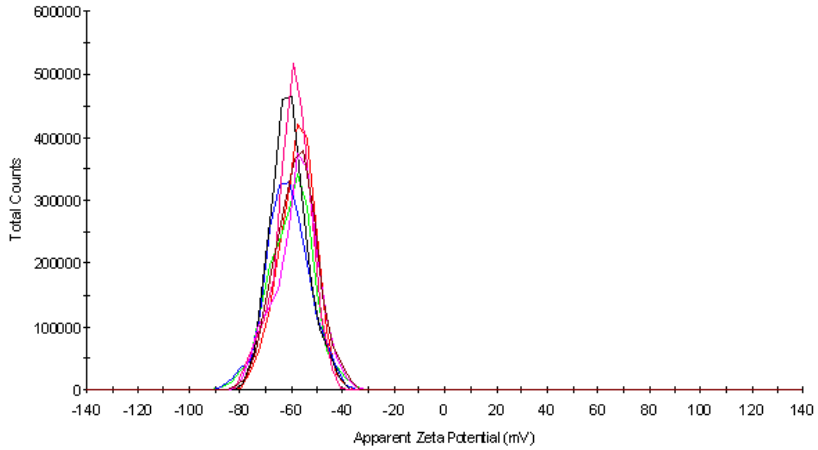


Figure S1. Characterization of fullerenol. A) Fullerenol particle size distribution determined by dynamic light scattering. The distribution curve is the average of three independent measurements. The intensity-weighted average was used to determine the hydrodynamic size. The error bars correspond to the standard deviation calculated from the measurements. The size distribution by volume (B) was used to estimate the relative importance of the two distinct populations in our interaction studies (after conversion into surface area). C) ζ potential distribution traces for fullerenol obtained with seven independent measurements.

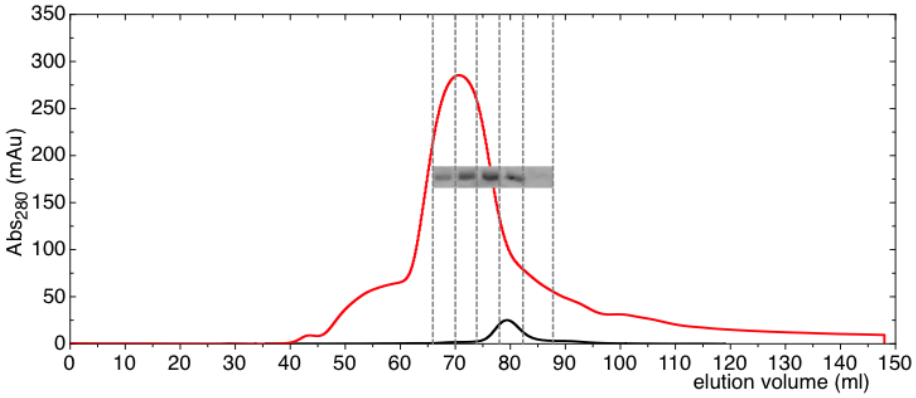


Figure S2. Monitoring fullerenol/Ub interaction by size-exclusion chromatography. Size separation was obtained with a Superdex G75 (GE Healthcare) column. The black line corresponds to the elution profile of Ub alone, while the red line refers to a sample containing Ub and fullerenol at [NP]/[protein] = 2. SDS-PAGE analysis of fractions from the Ub/fullerenol sample (overlaid on the red profile) indicates the presence of Ub at smaller elution volume than that characteristic of free Ub. The concentration of Ub samples was 400 μM.

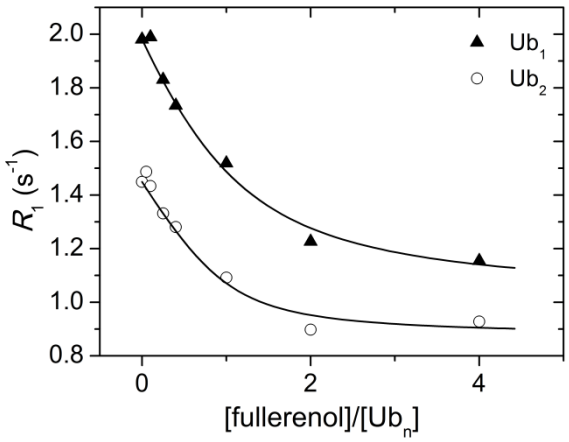


Figure S3. Concentration dependence of the ^{15}N relaxation rate and determination of the K_d. ^{15}N longitudinal relaxation rates are plotted against the NP/protein molar ratio. Data corresponding to Ub_2 were measured on Ub_2 (^{15}N-D). Best fit curves obtained assuming a 1:1 Ub:NP binding model are displayed.