Supplementary Material



Figure S1, In vitro toxicity test of CuS nanoparticels to SCC7 cells (incubation time = 24 h) was determined by the standard MTT assay. No obviously toxicity was observed even at high concentrations.



Figure S2. Synthesis and characterization of peptide-BHQ3. (a) Chemical structure of peptide-BHQ3. The cleavage site is between Gly and Val (b) HPLC spectral of peptide-BHQ3. (c) LC/MS spectrum of peptide-BHQ3



Figure S3. UV-vis-NIR spectral of CuS nanoparticles before and after conjugation of peptide-BHQ3. With EDC and NHS activity, peptide-BHQ3 can covalent conjugate to the surface of CuS nanoparticles. In contrast, without EDC adding, just a little of peptide-BHQ3 can adsorbed on the surface of CuS nanoparticles. Therefore, peptide-BHQ3 is covalent conjugated to CuS nanoparticles.