

Supporting Information

Graphene Oxide-Chitosan Nanocomposites for Phenethyl Isothiocyanate Delivery in Glioma

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Fig.S1 Digital photographs of the synthesized GO-PEITC and GOCS-PEITC nanocomposites.

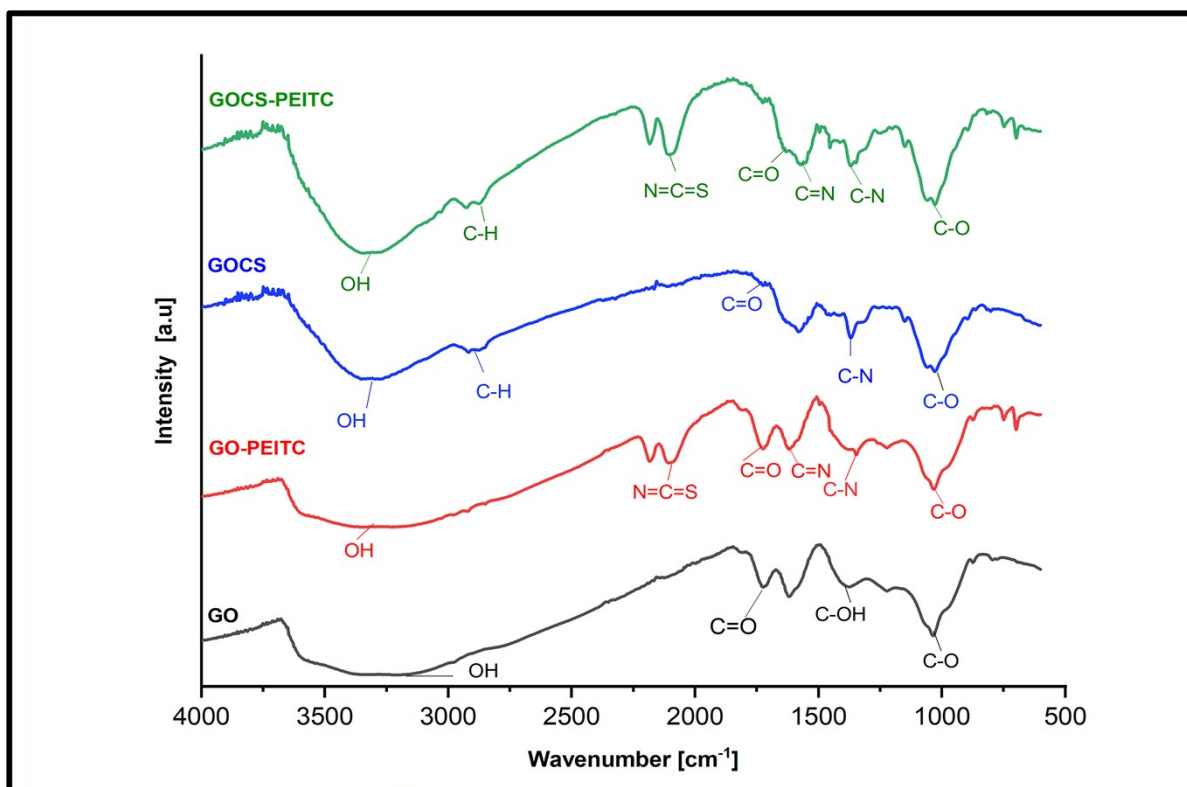


Fig. S2 FTIR spectra of GO, GOCS and the nanocomposites GO-PEITC, GOCS and GOCS-PEITC nanocomposites.

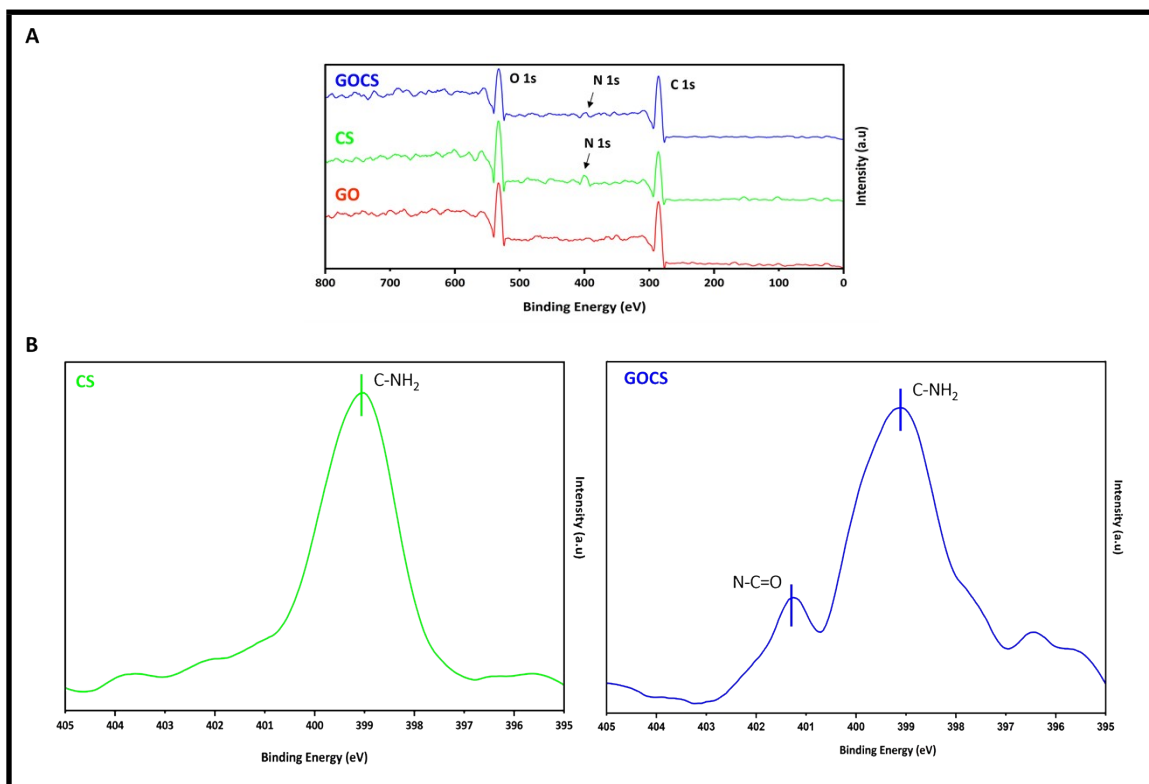


Fig. S3. (A) XPS survey spectra of GO, CS, and GOCS showing the C 1s, N 1s, and O 1s regions. (B) High-resolution N 1s spectra of CS and GOCS with assigned nitrogen-related regions, including C–NH₂ and amide N–C=O nitrogen species.

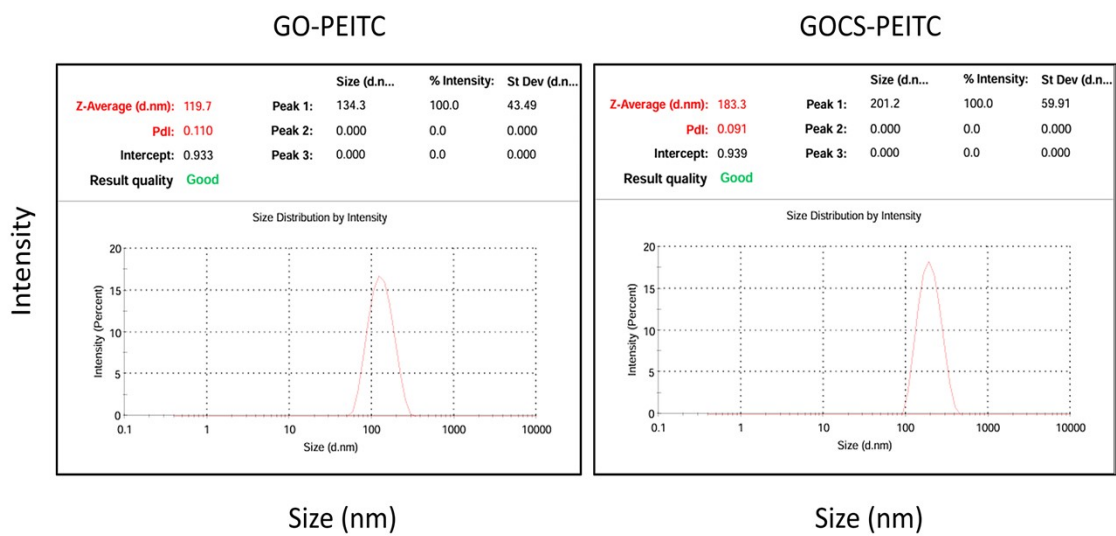


Fig. S4. Size distribution profiles of GO-PEITC and GOCS-PEITC nanocomposites measured by dynamic light scattering (DLS).

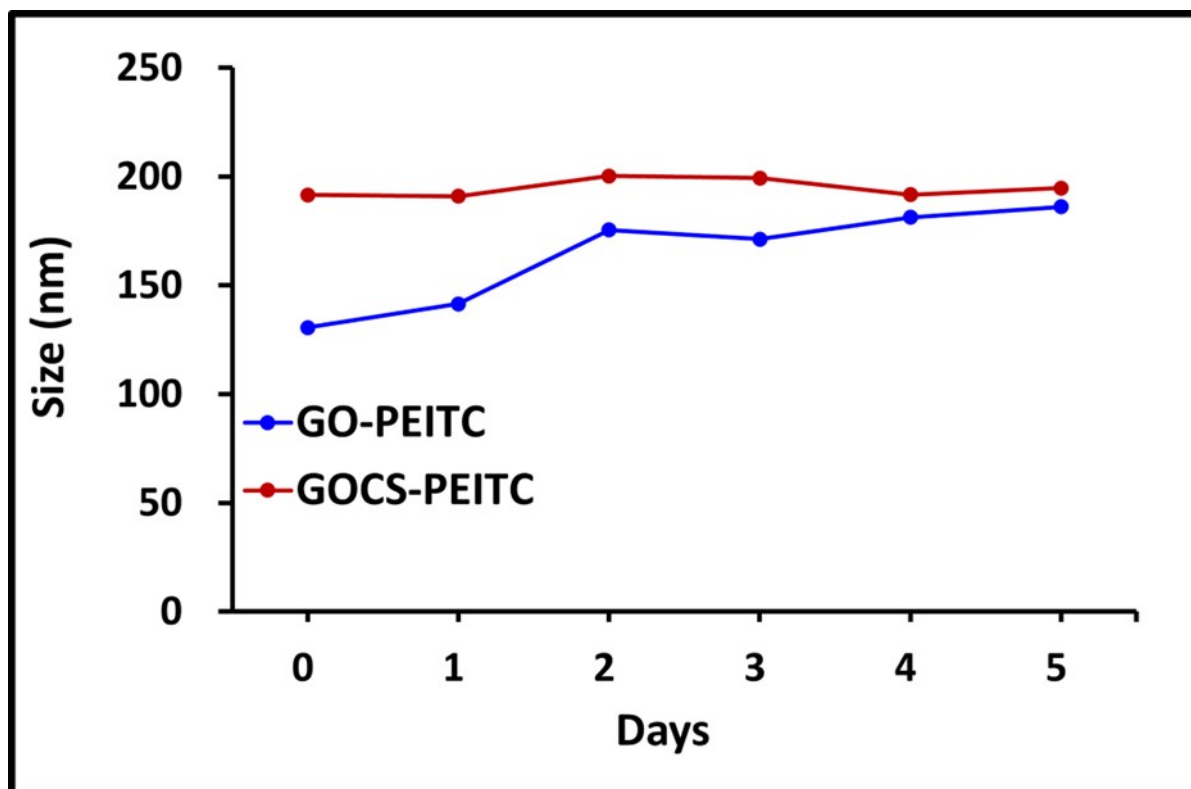


Fig. S5. Time-dependent stability of nanocomposites GO-PEITC and GOCS-PEITC in culture medium (DMEM+10%FBS).

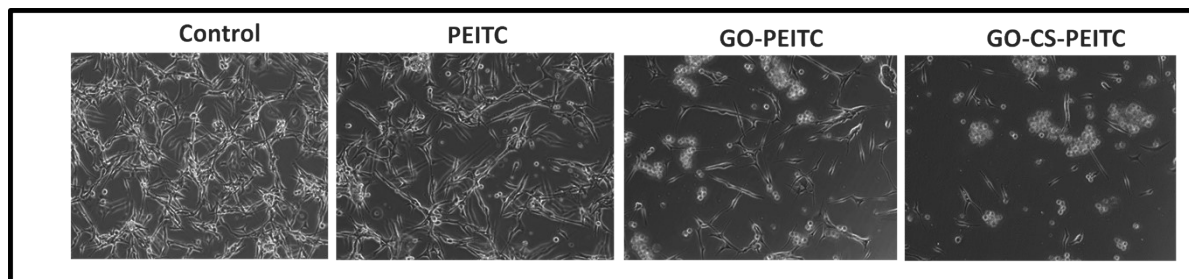


Fig. S6 Representative bright-field microscopy images (20X) of cells treated with PEITC, GO-PEITC, and GOCS-PEITC nanocomposites

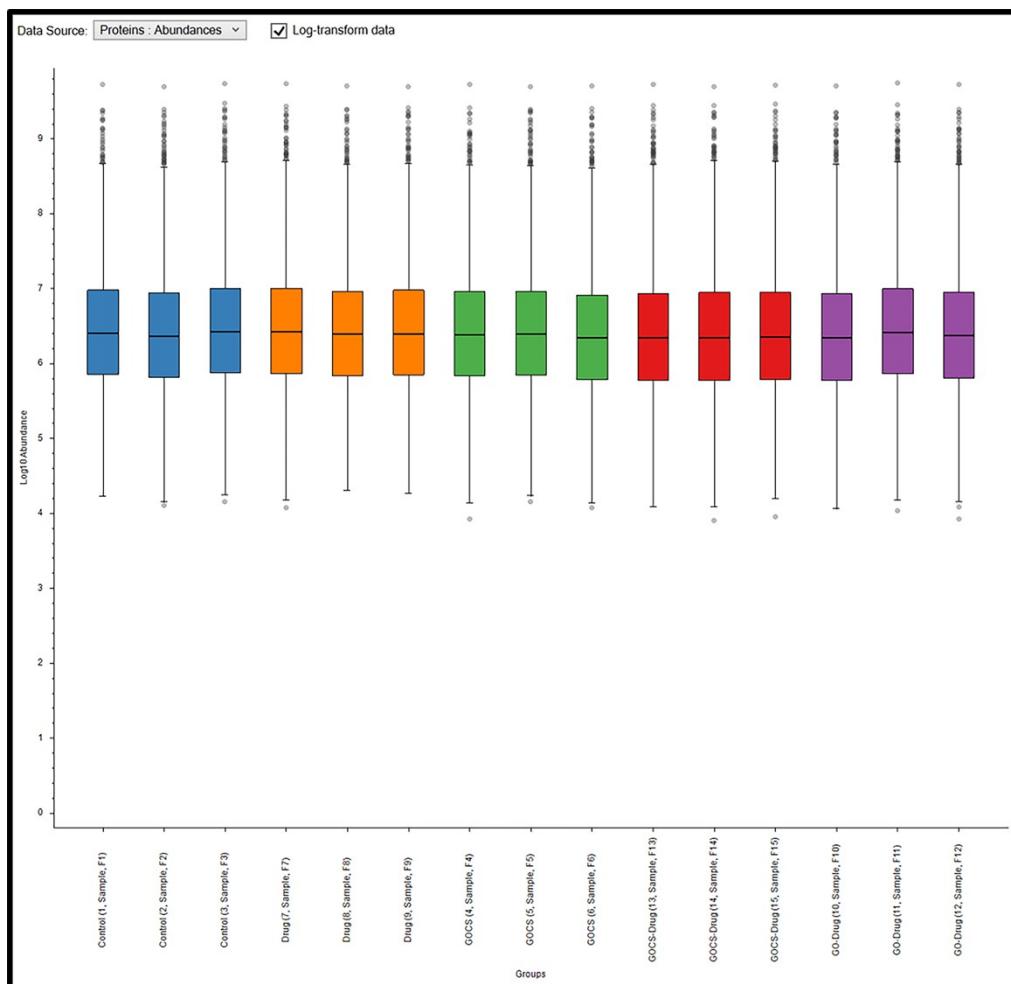


Fig. S7 Box plot showing the distribution of log-transformed protein abundances across samples obtained by quantitative proteomics analysis.

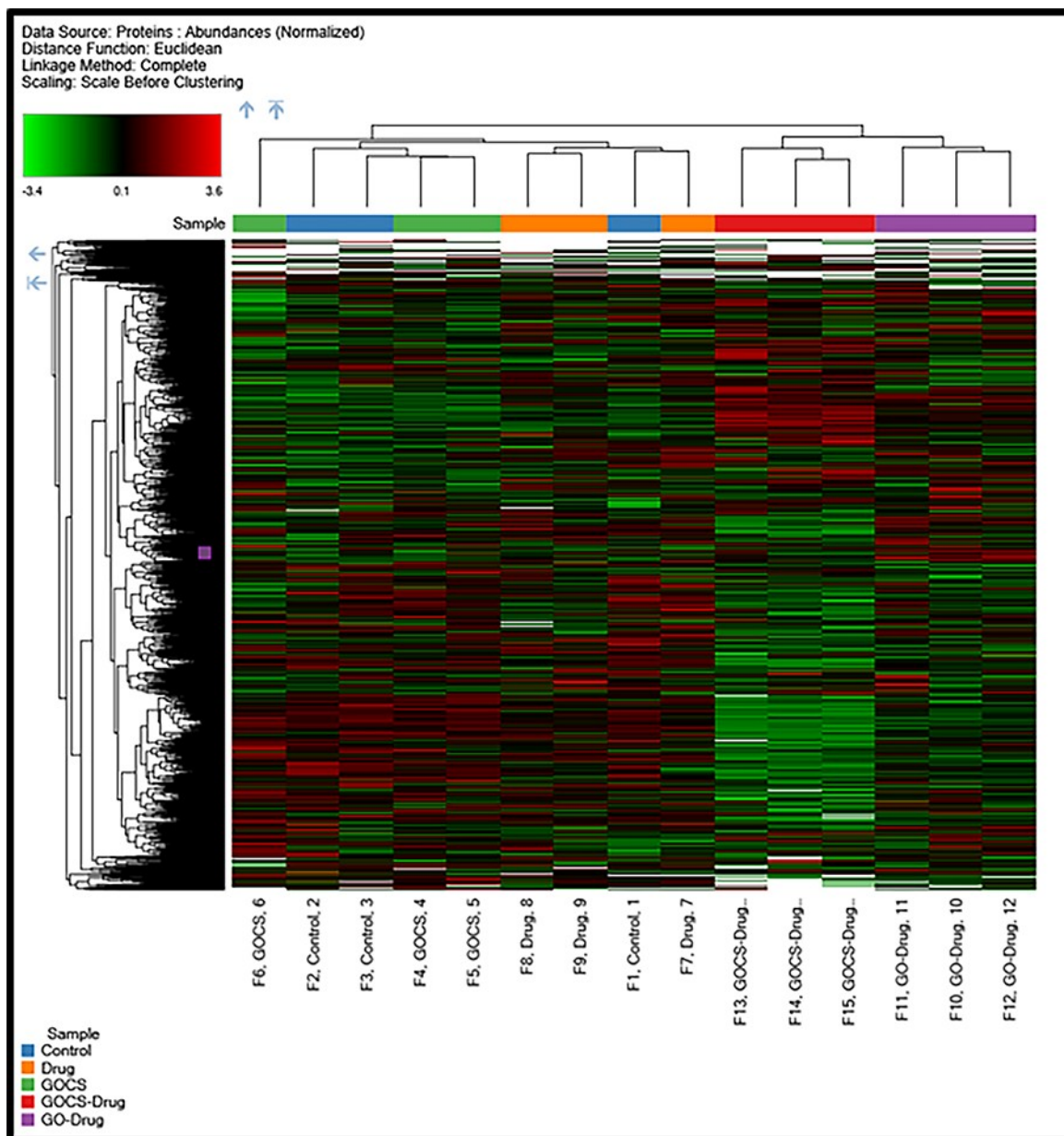


Fig. S8 Heatmap of normalized protein abundances across different treatment groups from quantitative proteomics analysis. Rows represent proteins and columns represent biological samples. Colors indicate relative protein expression levels. Sample group labels are shown at the top.

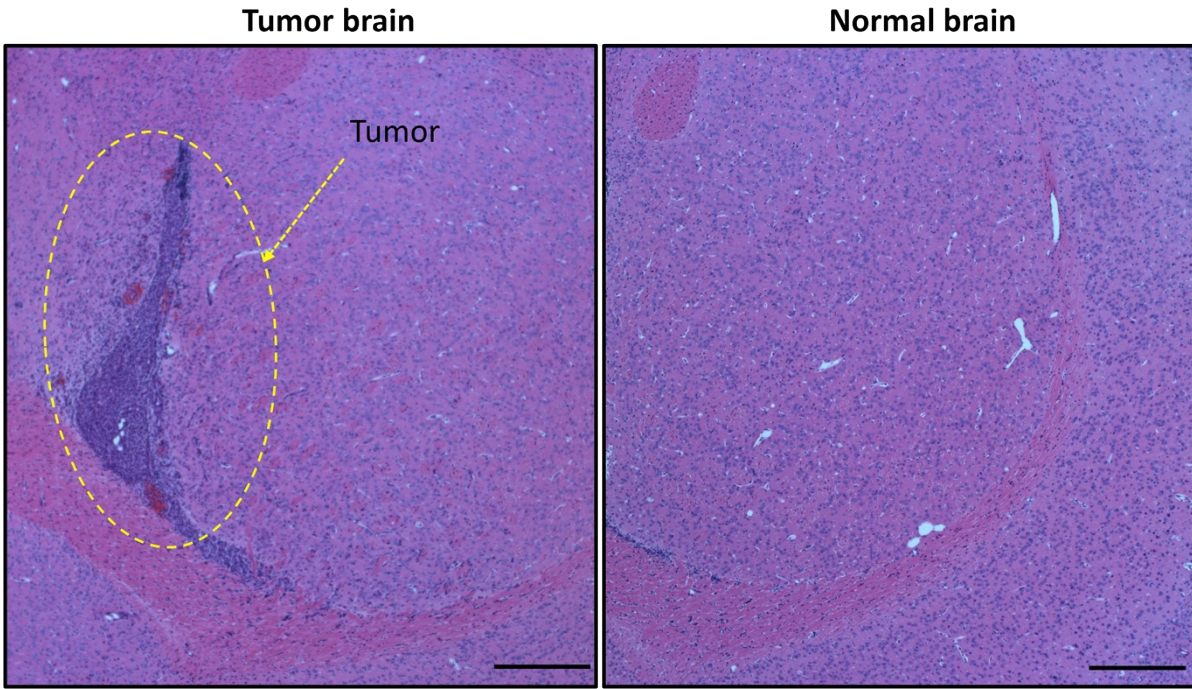


Fig. S9 Representative H&E stained brain sections showing the tumor region and adjacent normal brain tissue 7 days after GOCS injection. Scale bar = 1000 μm .

