

*Supporting Material*

# Peptide targeted gold nanoplatfrom carrying miR-145 induces antitumoral effects in ovarian cancer cells

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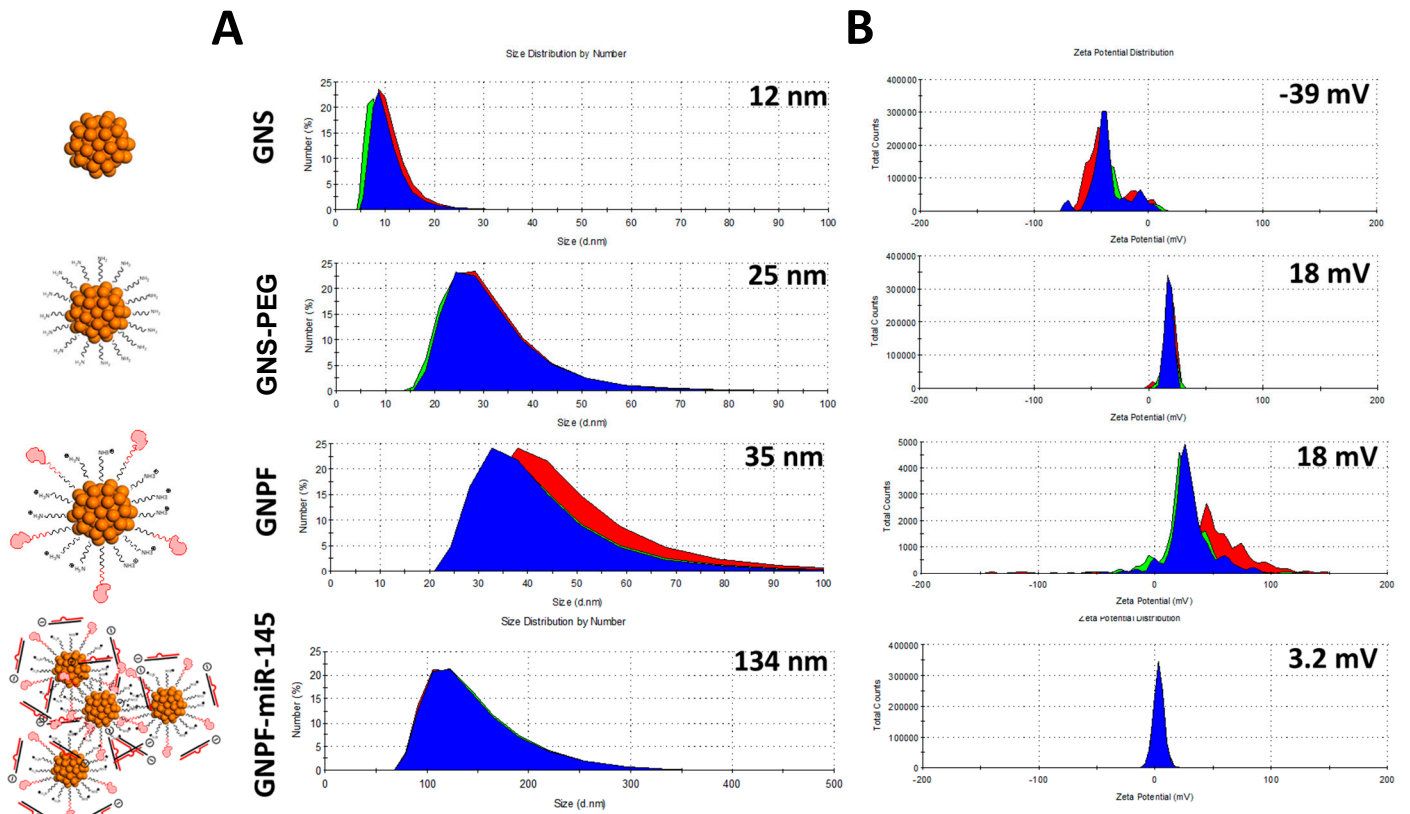
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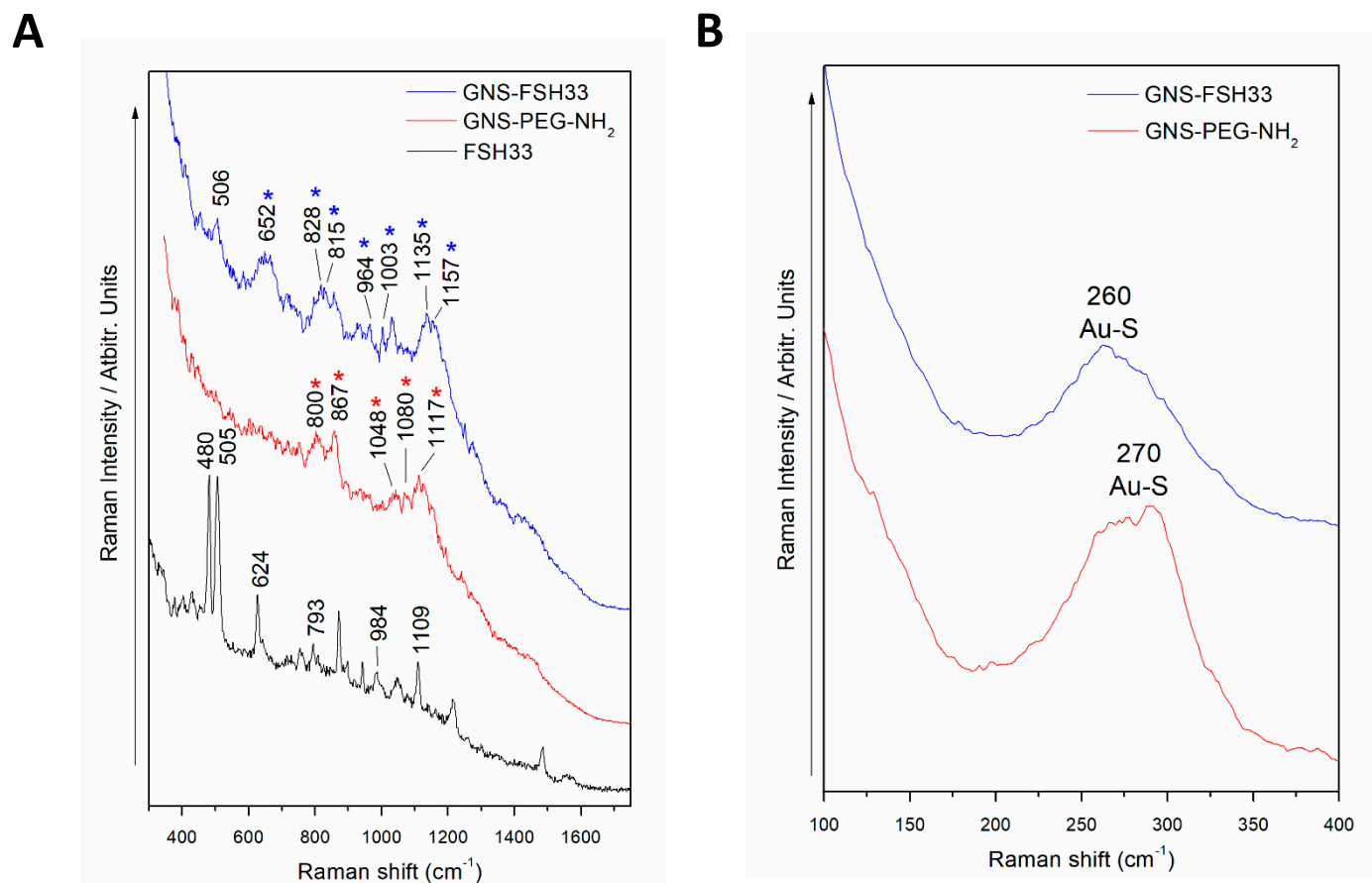
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# 1. Dynamic light scattering and Zeta potential distribution profiles



**Figure S1. DLS and ZP graphics of the gold nanosystems.** (A) DLS graphic of each nanosystem (GNS, GNS-PEG, GNPF and GNPF-miR-145) after its obtention and functionalization. The graphics are the representation of number vs diameter, and are constructed as normal scale (not logarithmic as the graphics from the equipment software). The measurements were made in triplicate each one with 15 replicates. On each graphic corner the size average appear. (B) Zeta potential graphics of each nanosystem. The graphics are the representation of total count vs mV. The measurements were made in triplicate each one with 15 replicates. On each graphic corner the Zeta potential average appear.

## 2. Raman and SERS spectra of nanosystems



**Figure S2.** (A) Raman spectrum of FSH33 (black line) and SERS spectra of GNS-PEG (GNS + HS-PEG-NH<sub>2</sub>) (red line) and GNPF (GNS + HS-PEG-NH<sub>2</sub> + FSH33) (blue line). All the spectra are displays in the region 300-1750 cm<sup>-1</sup>. (B) SERS spectra of Au-S vibrational region (100-400 cm<sup>-1</sup>) of GNS-PEG (GNS + HS-PEG-NH<sub>2</sub>) (red line) and GNPF (GNS + HS-PEG-NH<sub>2</sub> + FSH33) (blue line).