Electronic Supplementary Material (ESI) for Nanoscale.

Green synthesis of bacterial mediated anti-proliferative gold nanoparticles: Inducing mitotic arrest (G2/M phase) and apoptosis (Intrinsic pathway)

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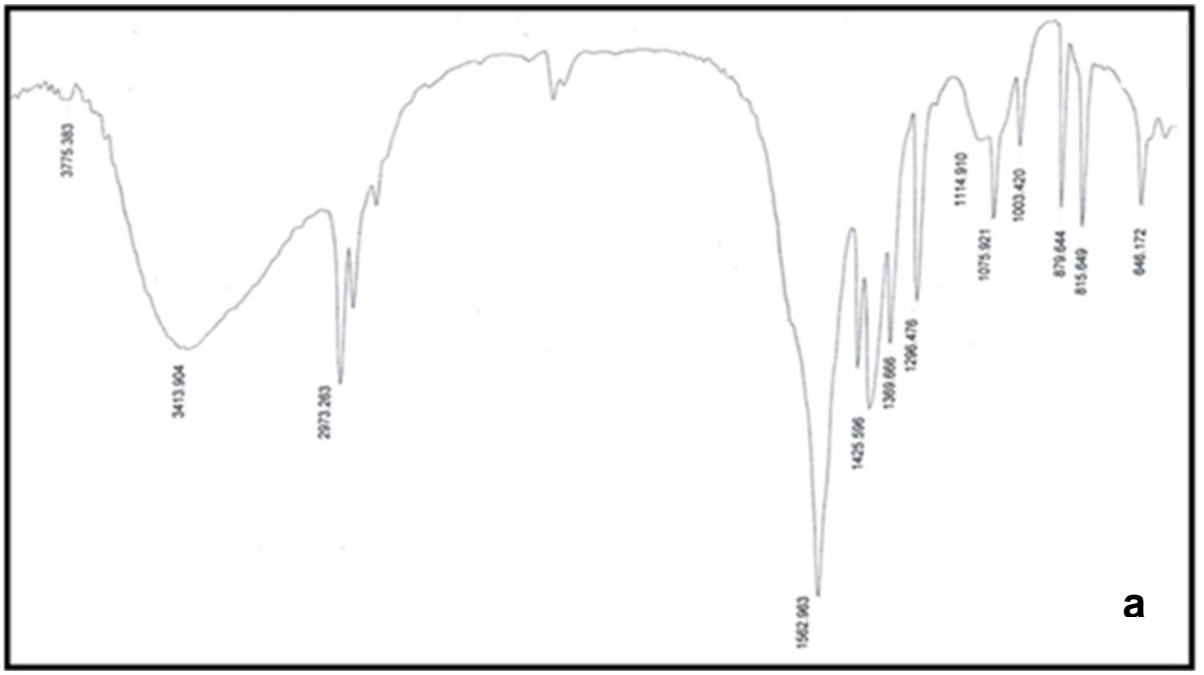
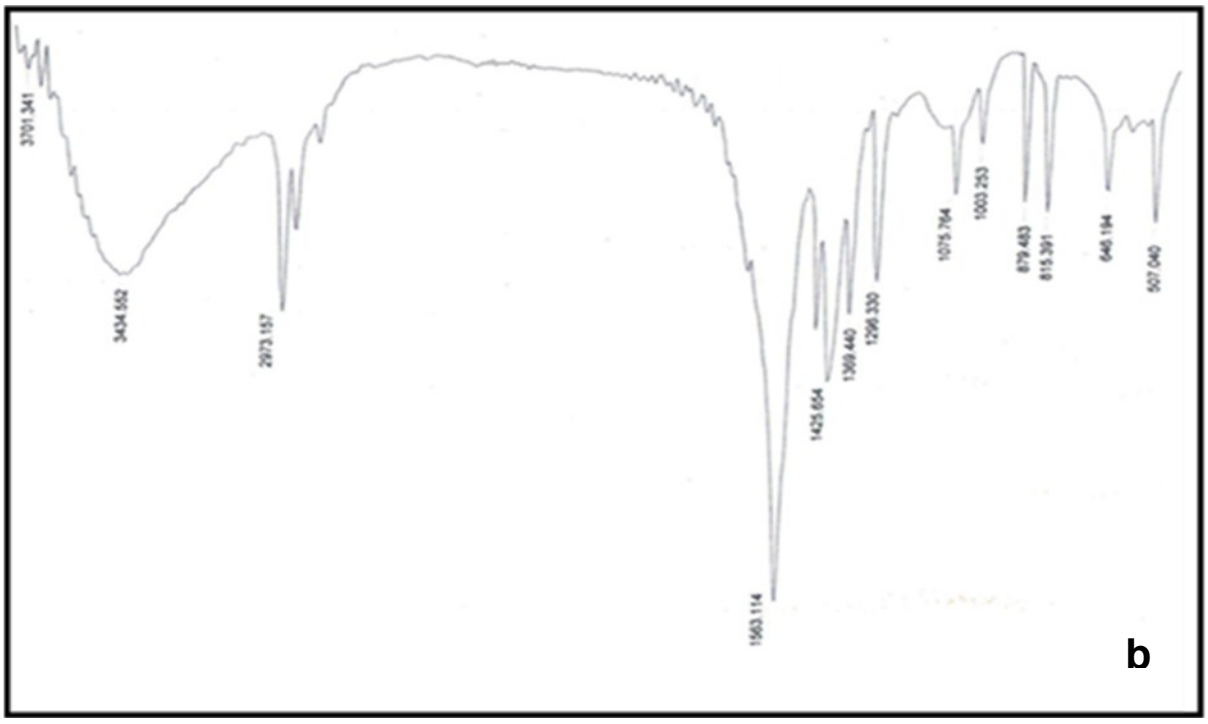
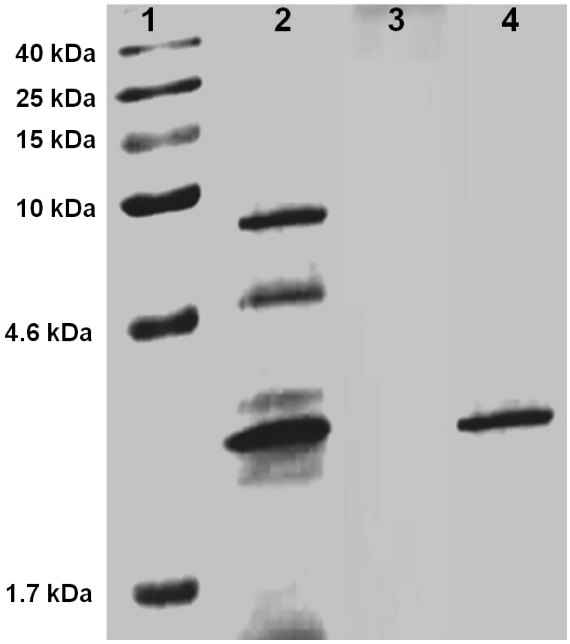
Supplementary Figure S1. FT-IR spectra of (A) cell free supernatant of *Streptomyces clavuligerus* and (B) b-AuNP.

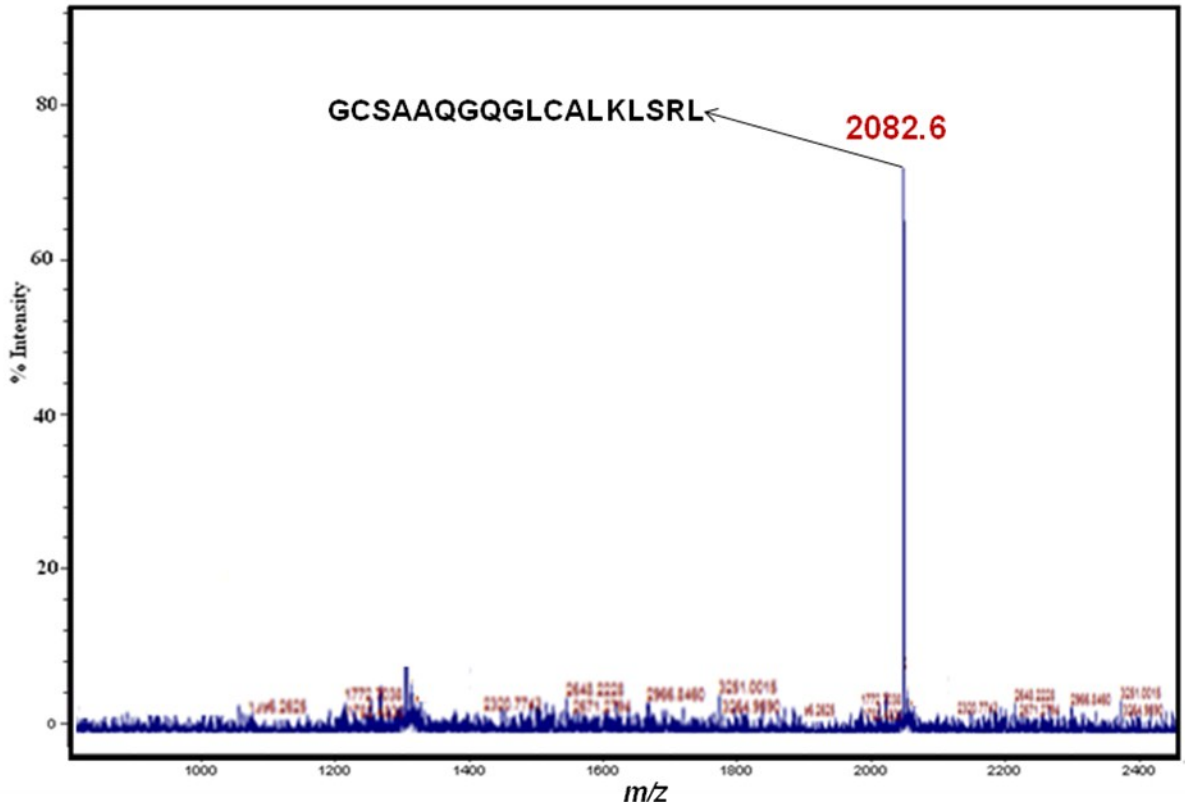




Supplementary Figure S2. SDS-PAGE analysis of the proteins present in the cell free supernatant of *Streptomyces clavuligerus* (SCS) and b-Au NPs [Lane 1: Protein marker, Lane 2: SCS, Lane 3: unboiled b-Au NPs and Lane 4: boiled b-Au NPs].



Supplementary Figure S3. MALDI-TOF mass spectra of the peptide present on the surface of gold nanoparticles and amino acid sequence of the peptide



Supplementary Figure S4. *In vitro* stability of b-AuNP in different biological solutions