

# **Supporting Information**

**for**

## **Enhanced antineoplastic/therapeutic efficacy using 5-fluorouracil-loaded calcium phosphate nanoparticles**

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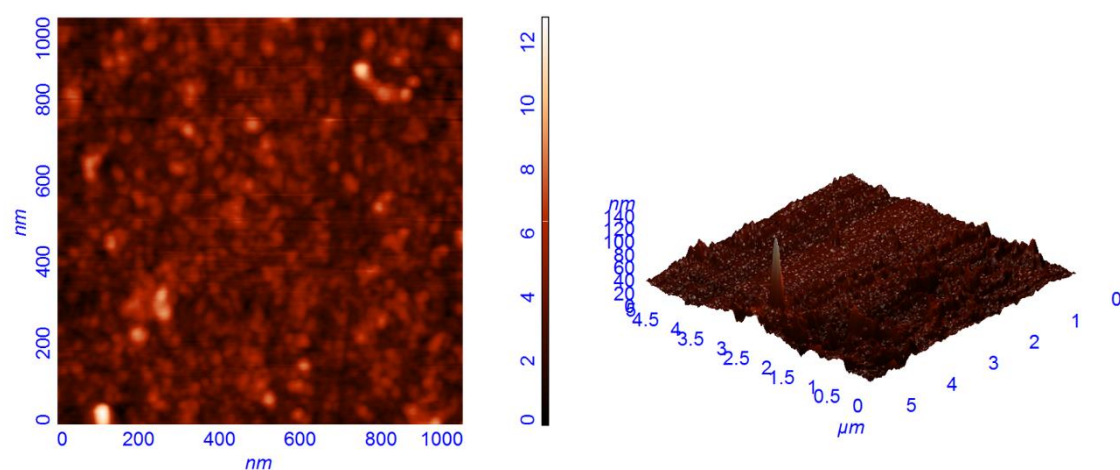
Email: Gopinath Packirisamy - genegopi@gmail.com

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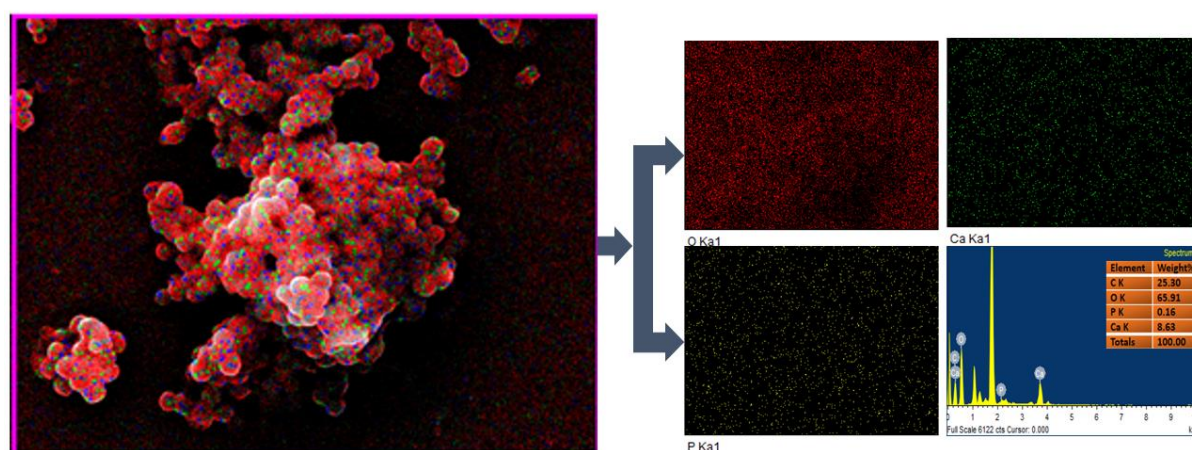
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## **Additional experimental information**



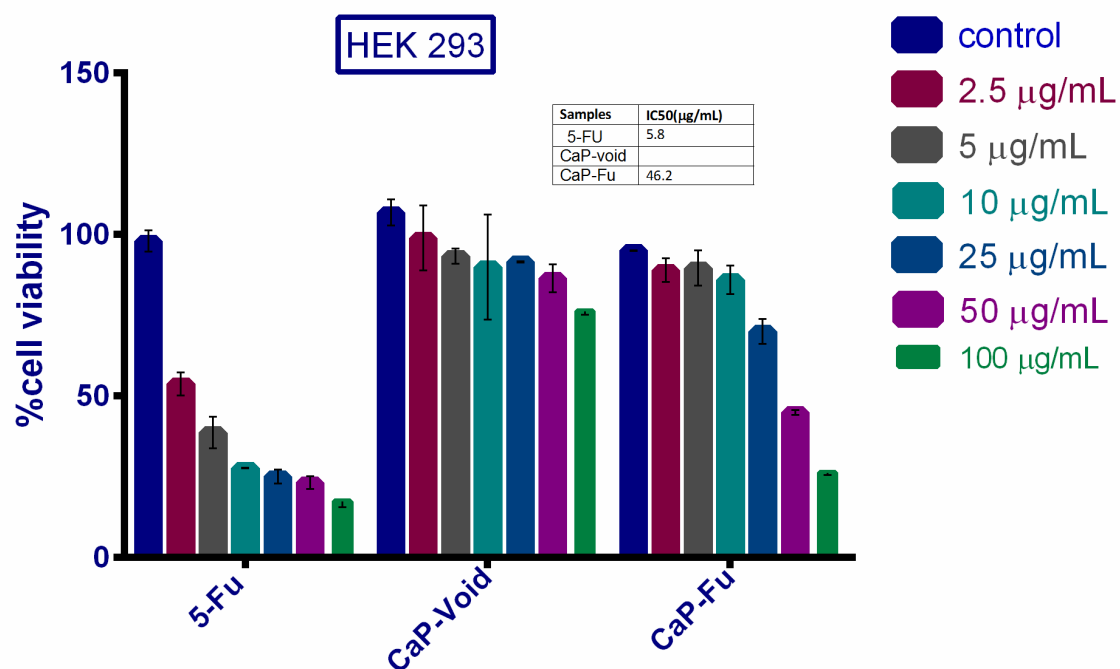
**Figure S1:** Atomic force microscopic image of CaP@5-FU Np's.



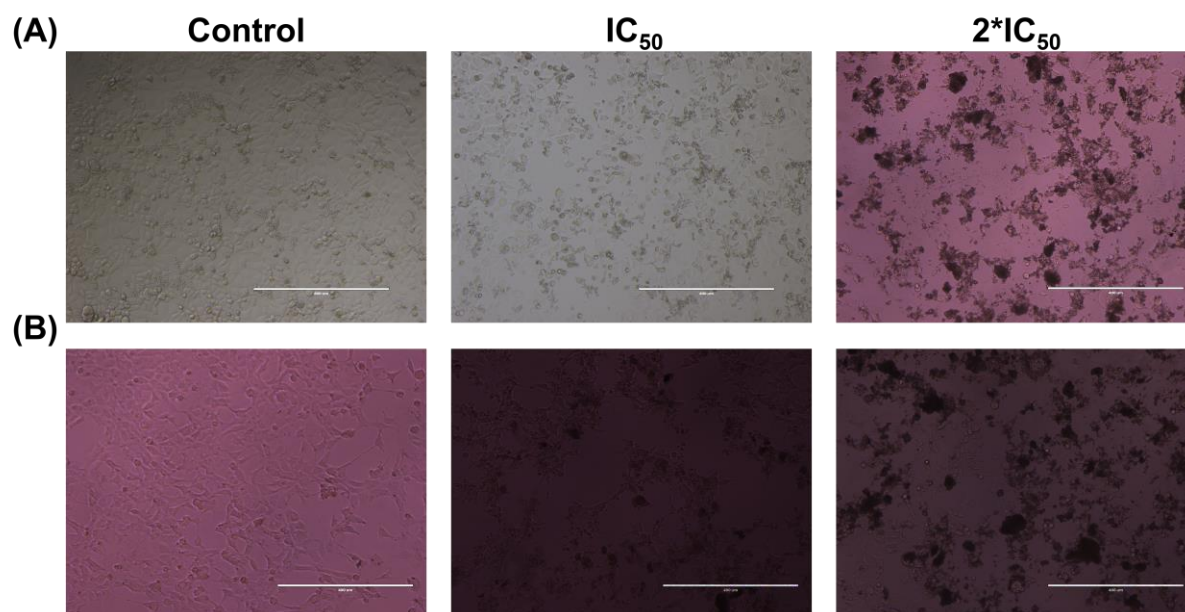
**Figure S2:** EDX analysis for elemental determination via FE-SEM of CaP@5-FU Np's with weight percentage as assessed.

**Table S1:** The primer pair for pro-apoptotic (Bax, Bad, Bak, p<sup>53</sup> and Caspase) and anti-apoptotic (Bcl-2 and Bcl-xL) genes used in semi-quantitative Reverse Transcriptase PCR.

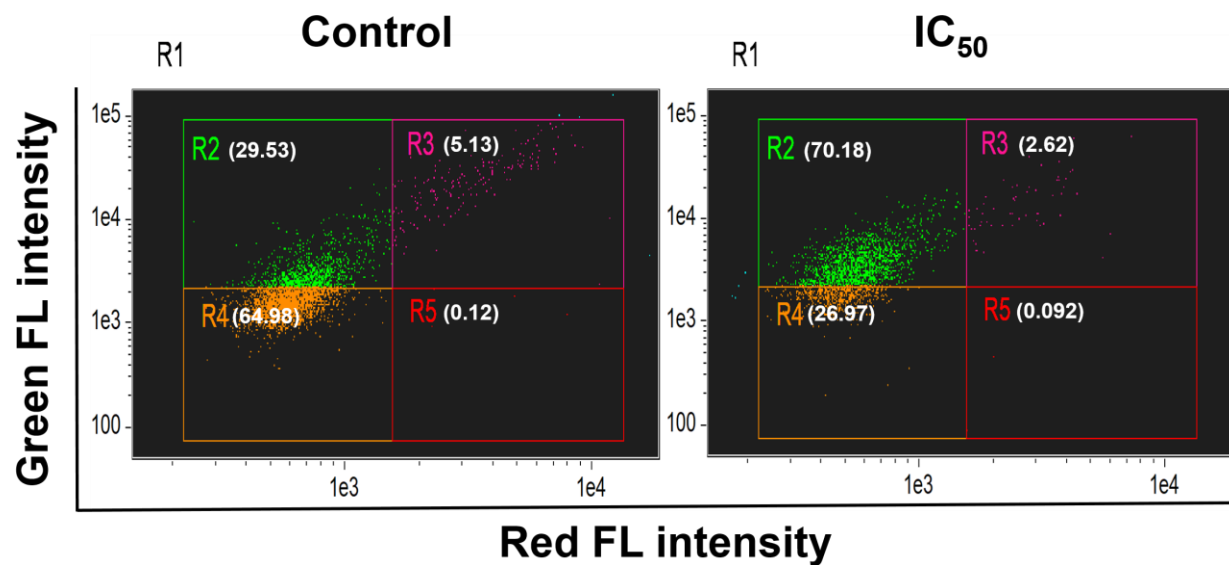
|                    |                                                                                        |
|--------------------|----------------------------------------------------------------------------------------|
| β-actin            | Forward: 5'-CTGTCTGGCGGCACCACCAT-3'<br>Reverse: 5'-GCAACTAAGTCATAGTCCGC-3'             |
| Bcl-2              | Forward: 5'-AGATGTCCAGCCAGCTGCACCTGAC-3'<br>Reverse: 5'-AGATAGGCACCCAGGGTGATGCAAGCT-3' |
| Caspase-3          | Forward: 5'-TTTGTTTGTGTGCTTCTGAGCC-3'<br>Reverse: 5'-ATTCTGTTGCCACCTTTCGG-3'           |
| Bak                | Forward: 5'-TCCAGATGCCGGAATGCACTGACG-3'<br>Reverse: 5'-TGGTGGGAATGGGCTCTCACAAGG-3'     |
| Bcl X <sub>L</sub> | Forward: 5'-ATGGCAGCAGTAAAGCAAGCGC-3'<br>Reverse: 5'-TTCTCCTGGTGGCAATGGCG-3'           |
| p53                | Forward: 5'-TGGCCCCTCCTCAGCATCTTAT-3'<br>Reverse: 5'-GTTGGGCAGTGCTCGCTTAGTG-3'         |
| Bad                | Forward: 5'-CCTTTAAGAAGGGACTTCCTCGCC-3'<br>Reverse: 5'-ACTTCCGATGGGACCAAGCCTTCC-3'     |
| Bax                | Forward: 5'-AAGCTGAGCGAGTGTCTCAAGCGC-3'<br>Reverse: 5'-TCCCGCCACAAAGATGGTCACG-3'       |



**Figure S3:** MTT assay of CaP@5-FU Np's, CaP Np's and 5-FU in HEK 293 cell line.



**Figure S4:** Bright field morphological images of (A) HCT-15 and (B) HEK-293 cells upon treatment of CaP@5-FU with IC<sub>50</sub> and 2\* IC<sub>50</sub> concentration.



**Figure S5:** Flow cytometric data of JC-9 fluorescence quantification of CaP@5-FU with IC<sub>50</sub> treated HCT-15 cells for mitochondrial membrane potential.