Supplementary Materials

Magnetic nanoclusters stabilized with poly[3,4-dihydroxybenzhydrazide] as efficient therapeutic agents for cancer cells destruction

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1. XPS determination:

Table S1: N1s binding energies and surface chemical states identified from XPS measurements.

	N1s	Chemical state	at. %
DHBH@MNC	399.4 eV	N-C, NH_2	53.4%
	400 eV	N-(C=O)-	35%
	401.8 eV	NH^{3+}	11.5%
PDHBH@MNC	398.6 eV	N-C, NH_2	41.8%
	399.6 eV	N-(C=O)-	58.2%

2. Heating curves of MNC internalized in cells:

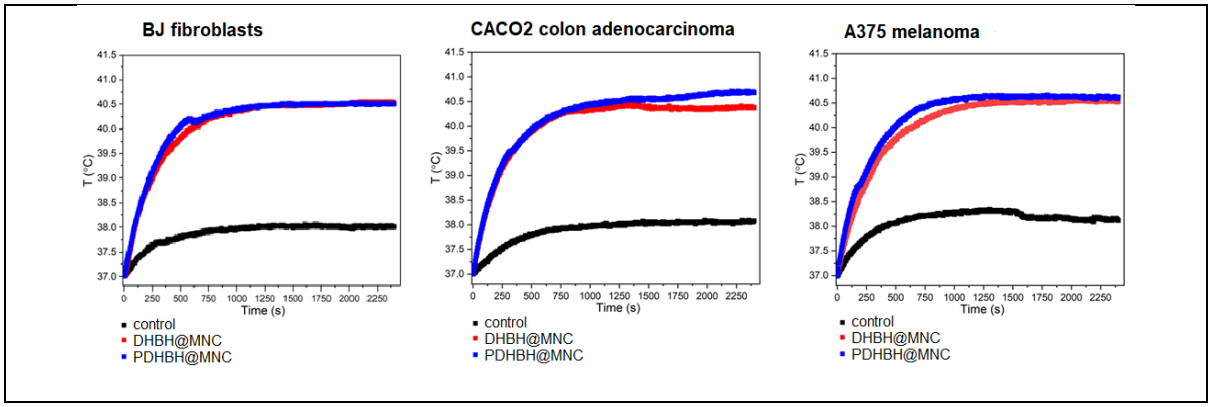
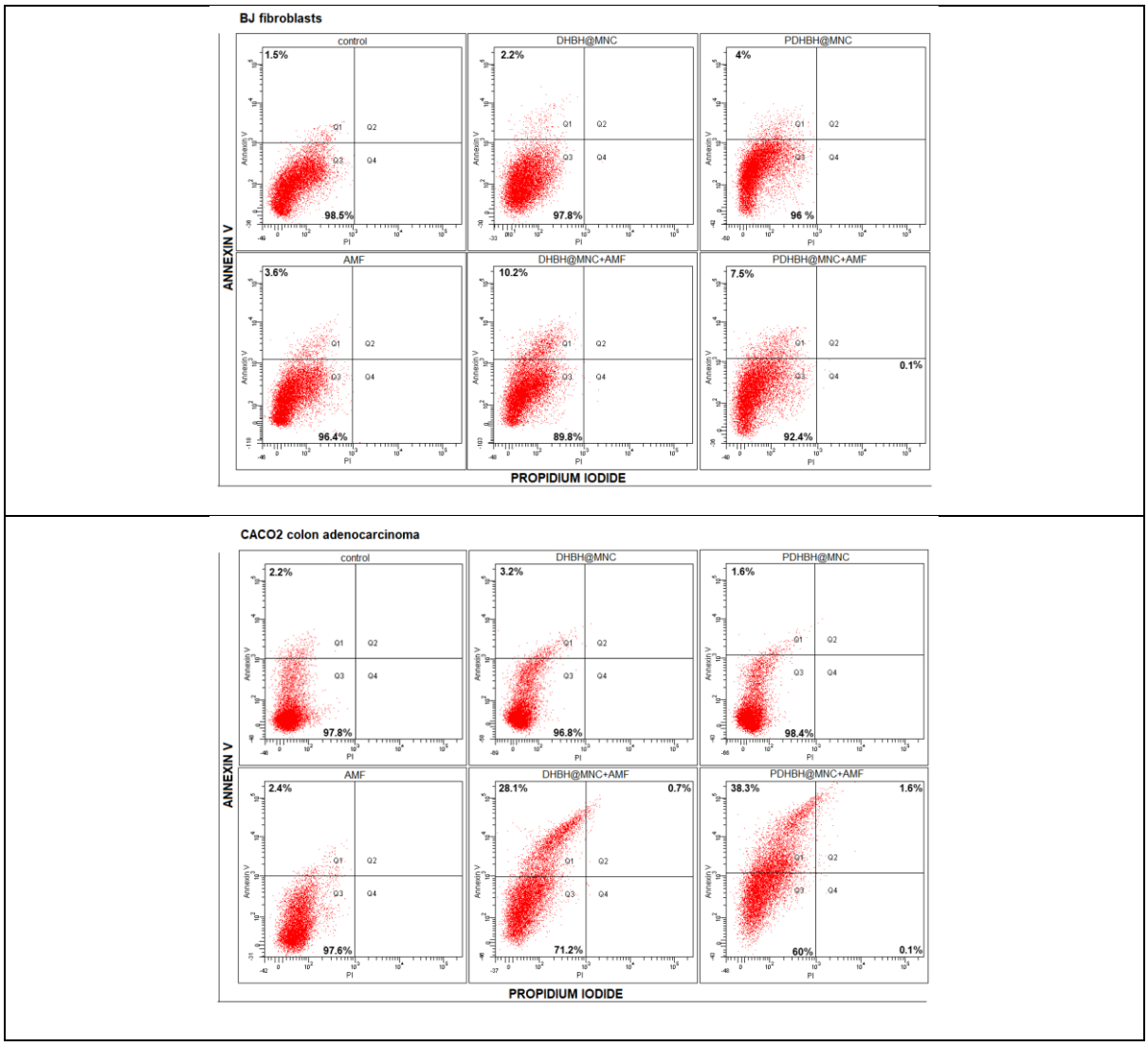


Figure S1. Typical heating curves of cells without and with internalized MNC exposed to an AMF (40 kA/m; 355 kHz) for 40 minutes.

3. Flowcytometric assessment:



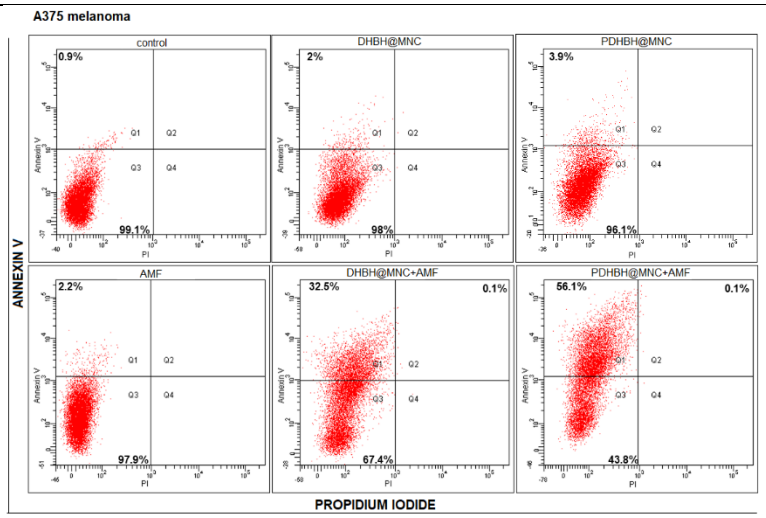


Figure S2. Flowcytometric assessment of the cell death induction by MH exposure: (a) fibroblasts (BJ), (b)-CACO2 and (c) A375 cells . Comparative FACS analysis, quantitative FACS results are expressed as % of total cells counted – viable cells Annexin V (-)/ PI (-) – Q3, early apoptotic cells Annexin V(+) – Q1, necrotic cells PI (+) – Q4, late apoptosis Annexin V (+)/PI (+) – Q2 quadrant, a minimum of 10000 events were quantified for each lot