

SUPPORTING INFORMATION

Title

Dynamic Magnetic Fields Remote Control Apoptosis *Via* Nanoparticle Rotation

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Movie 1: Illustrates the rotational control of magnetic microparticles achieved with the DMF device. The control of 500-nm particle rotation in Krebs buffer was done using 5-15 Hz DMF.

Movie 2: Illustrates the rotational control of magnetic nanoparticles achieved with the DMF device. The control of 300-nm particle rotating in Krebs buffer was done by 5-15 Hz DMF.

Movie 3: Dynamic confocal microscopy study illustrating the real-time destruction of lysosomes via DMF and LAMP1-SPIONs. The movie was taken by confocal microscopy with three channels: channel 1, LysoTracker®Green DND-26 fluorescence (green, acidotropic probe to indicate lysosomes) the intensity of which dropped down immediately after DM treatment; channel 2, (red) which indicates 100-nm SPIONs in lysosomes and channel 3, which shows translucent light.