Analytical and Bioanalytical Chemistry

Electronic Supplementary Material

The toxicity outcome of silica nanoparticles (Ludox®) is influenced by testing techniques and treatment modalities

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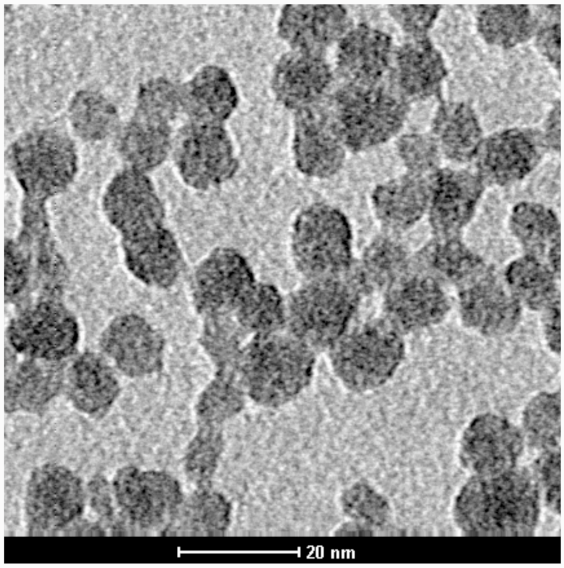
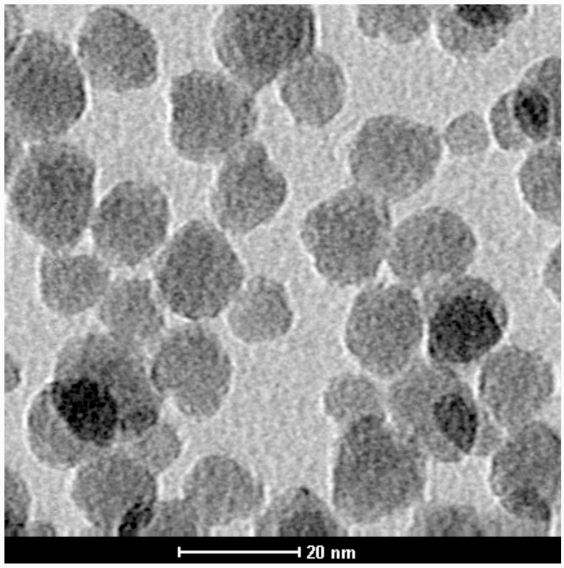
Fig.S1. TEM images and characterization data of SM30 and AS30 Ludox® NPs.



SM30



AS30

	Counterion*	ζ potential in PBS	DLS diameter in PBS	Diameter from TEM in PBS	Surface area*	pH*
SM30	sodium	-26.3 mV	14 ± 4 nm	9 ± 3 nm	345 m^2/g	10.0
AS30	ammonium	-25.9 mV	20 ± 4 nm	18 ± 3 nm	230 m^2/g	9.1

* Data provided by Sigma-Aldrich

Fig. S2. Cell viability measured by MTS assay in HT-1080, A549 and CCD-34 Lu cells treated with increasing concentrations of Ludox® NPs AS30 in medium with 3% of serum (a) or without serum, followed by a recovery for 3 or 22h in complete medium (10% of serum) (b). The data represent mean ± S.D. ($3 \leq n \leq 15$). *p <0.05, **p <0.01 (t test; treated vs. control cells).

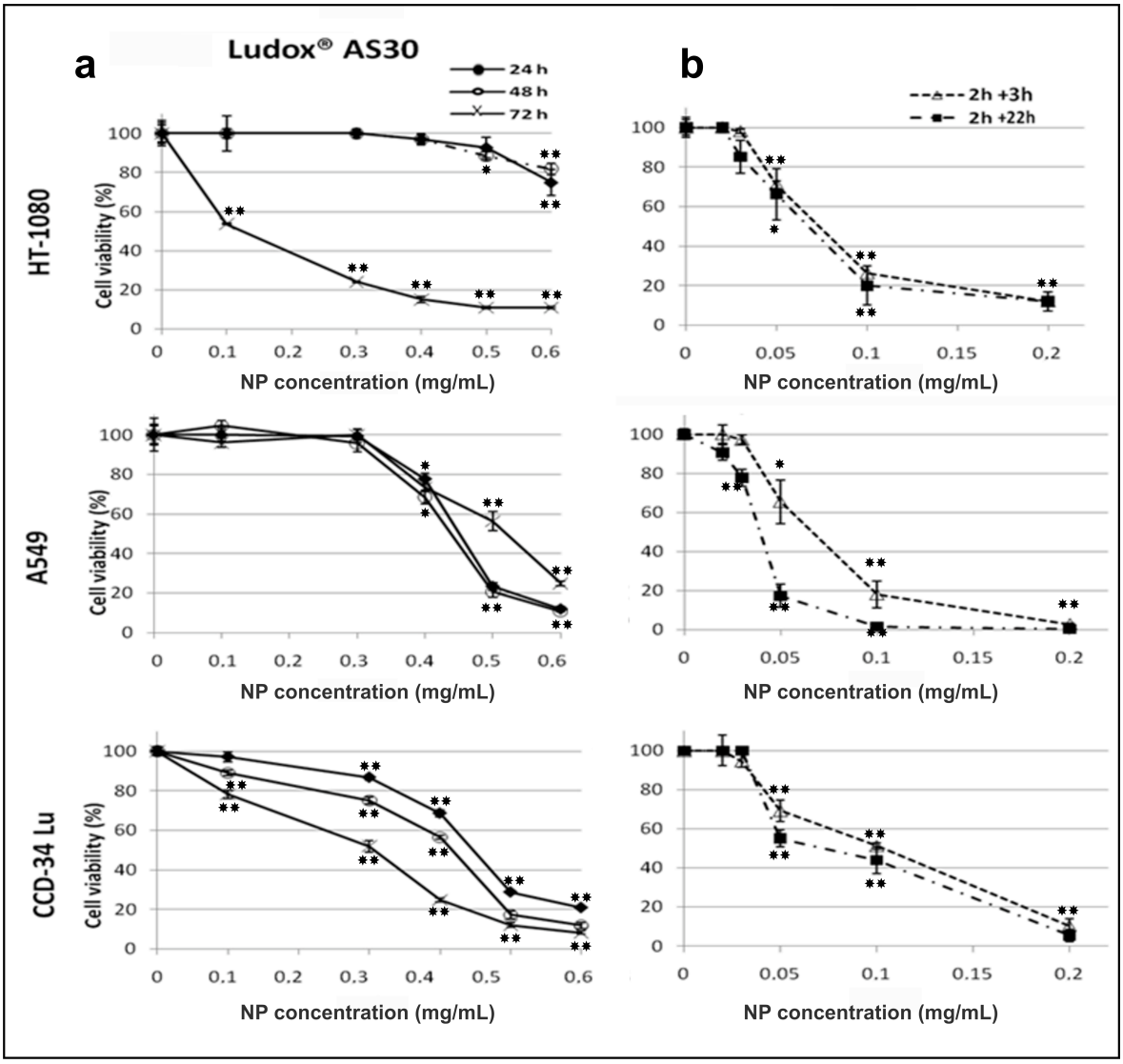


Fig.S3. Cell survival measured by clonogenic assay in HT-1080, A549 and CCD-34Lu cells treated with increasing concentrations of Ludox® NPs AS30. Cell cloning was performed after a 24h treatment with NPs in medium containing 3% of serum (a), or after a 2h treatment in serum-free medium followed by a recovery for 3 or 22h in complete medium (b). The data represent mean ± S.D. ($3 \leq n \leq 12$). *p <0.05, **p <0.01 (t test; treated vs. control cells).