nanomaterials

MDPI

SUPPLEMENTARY MATERIALS

Evaluation of the NLRP3 Inflammasome Activating Effects of a Large Panel of TiO_2 Nanomaterials in Macrophages

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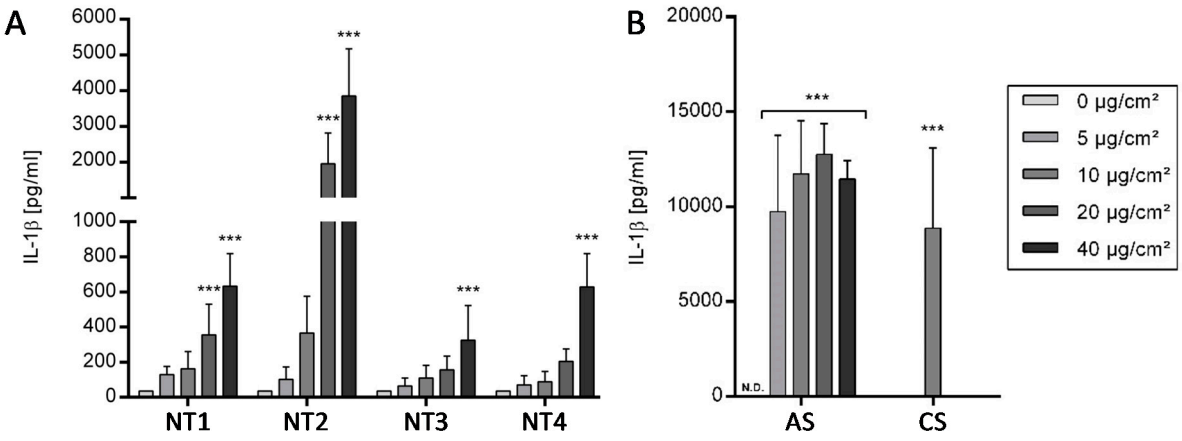

Figure S1. Interleukin-1β concentrations in cell culture supernatants of BMDMs after 24 h treatment with different TiO_2 NMs, amorphous silica and crystalline silica. BMDMs were primed for 4 h with 10 ng/ml LPS followed by 24 h treatment with 5–40 µg/cm² TiO_2 NMs (NT1, NT2, NT3, NT4) or amorphous SiO_2 (AS). The crystalline silica sample DQ12 (CS) was used as a positive control at a single concentration of 10 µg/cm². IL-1β concentrations in culture supernatants were analysed by ELISA. Mean and standard deviation of 3 independent experiments are depicted. The asterisks indicate a significant change in IL-1β concentration compared to untreated control (* $p \leq 0.05$; *** $p \leq 0.001$; N.D. = not detectable).

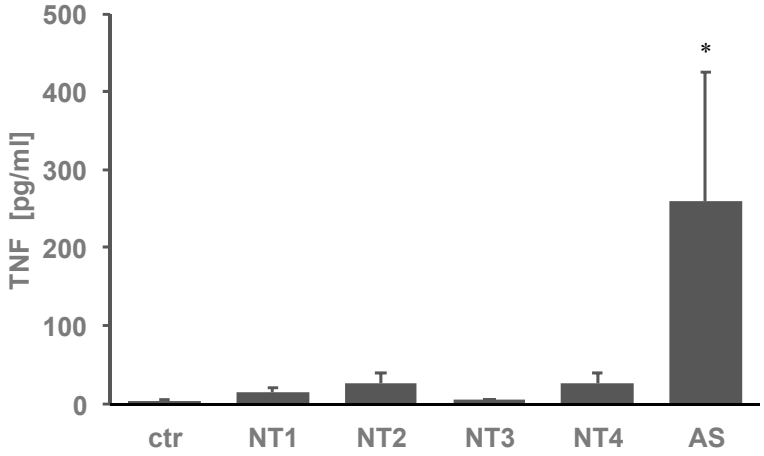

Figure S2. Tumor Necrosis Factor concentrations in supernatants of NR8383 cell cultures after 24 h treatment with different TiO_2 NMs and amorphous silica. The cells were treated for 24 h with 40 µg/cm² of the four different TiO_2 NMs (NT1-4) or amorphous silica (AS). Levels of TNF in culture supernatants were detected by a commercial rat ELISA kit according to the manufacturer's instructions (R&D/Biotechne, Minneapolis, MN, USA). Mean and standard deviation of three independent experiments are depicted. The asterisks indicate a significant difference compared to the untreated controls. (* $p \leq 0.05$).