

# Supplementary information 5

## CB size determined by dynamic light scattering

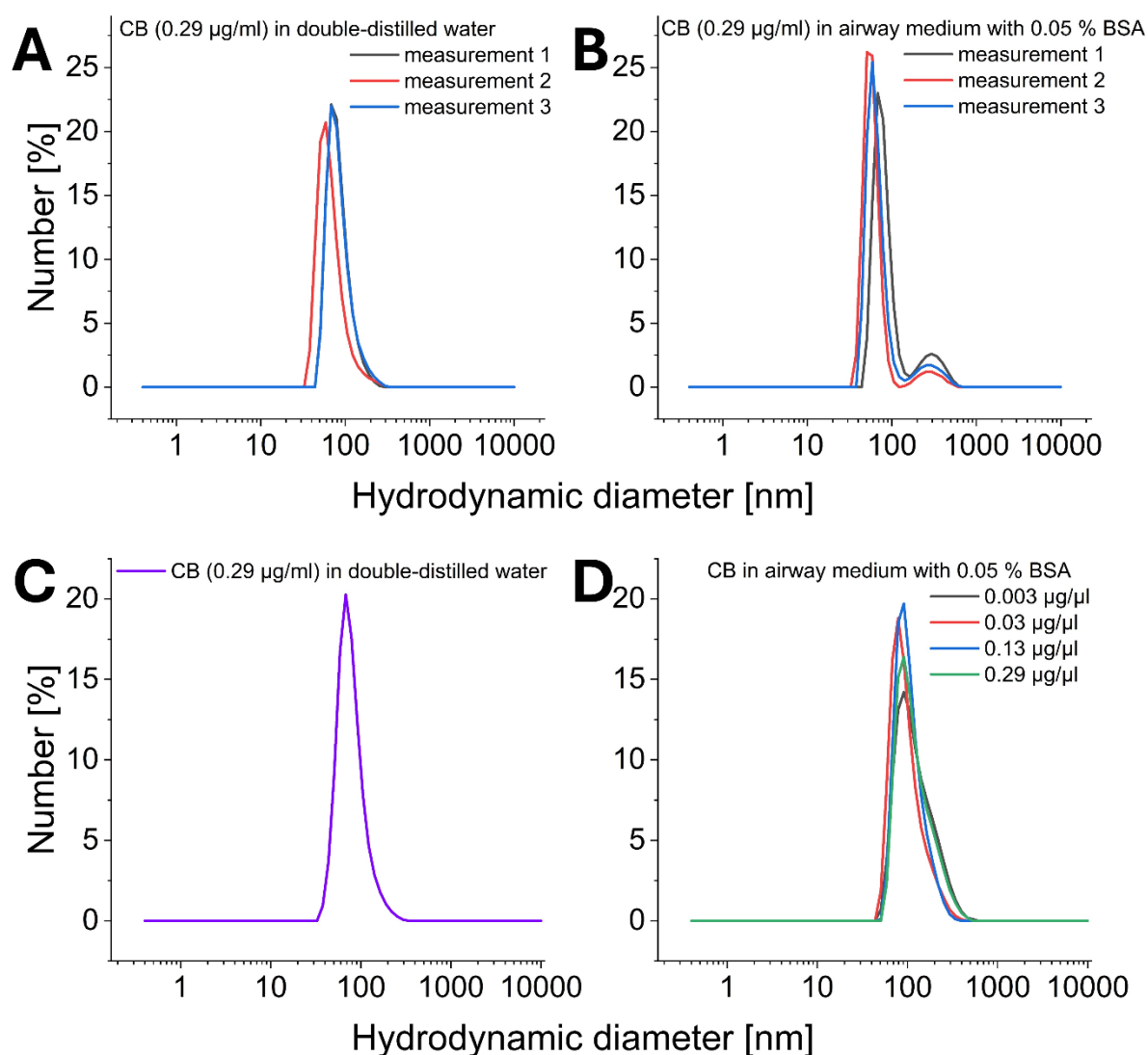


Figure SI 5: CB by DLS in two independent experiments (A and B, and C and D, respectively). Dynamic light scattering analysis of particle size when dissolved in double-distilled water (left, A and C) and cell culture medium (right, B and D). In D, the concentrations applied in the biological exposures were investigated as indicated by the different colors and legend in the figure. No concentration-dependent difference was detected. Particles were sonicated shortly before the measurements and 3 consecutive measurements were performed (1-3 indicated in B. In D, averages of the three measurements are shown for better visibility when different concentrations were investigated). The hydrodynamic diameter peak was at ~70 nm in both experiments, as expected for CB. The larger particle fraction (>150 nm diameter) which was detected in airway medium can be seen as a second peak in B and as a tail on the right-hand side of the peak in D. The difference in this larger fraction between B and D is due to minor deviations in the size distribution of the larger particles between the two experiments. The dominant peak at ~70 nm remained stable in both experiments and for all concentrations.