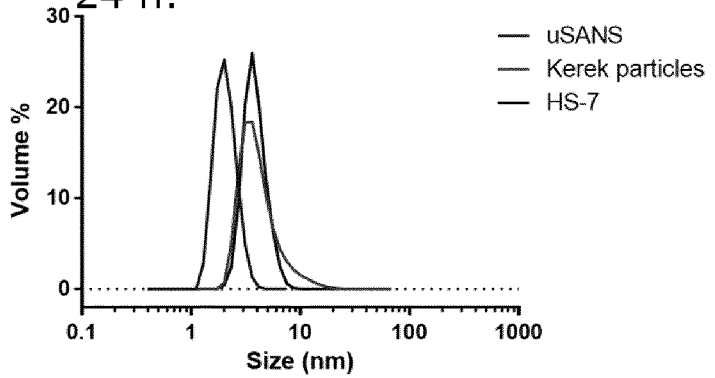
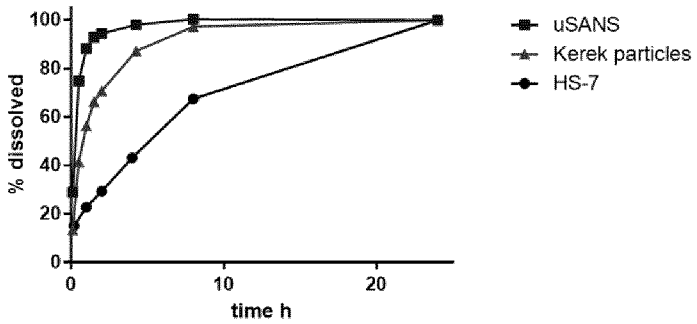
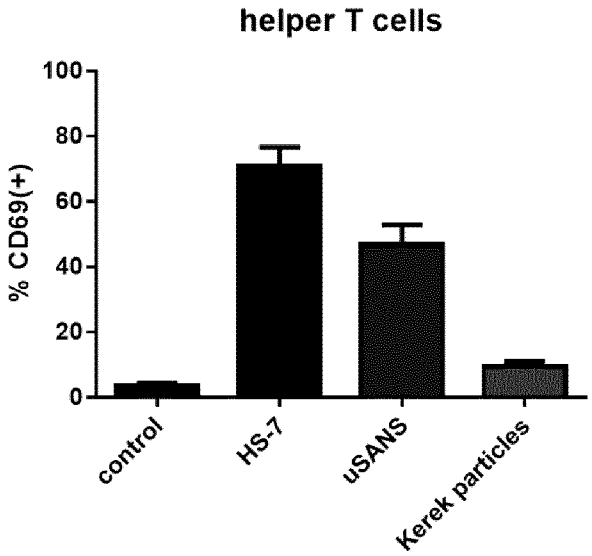
Figure 1: T cell activation by various patented materials in PBMC

- Nanosilica particles were synthesized according to example 4 ($Si(OMe)_4$) from biologically active silicic acid (Kerek 2011, Patent application) by C. Bastos
- Cells were treated with the nanoparticles and activation was assessed after 24 h.



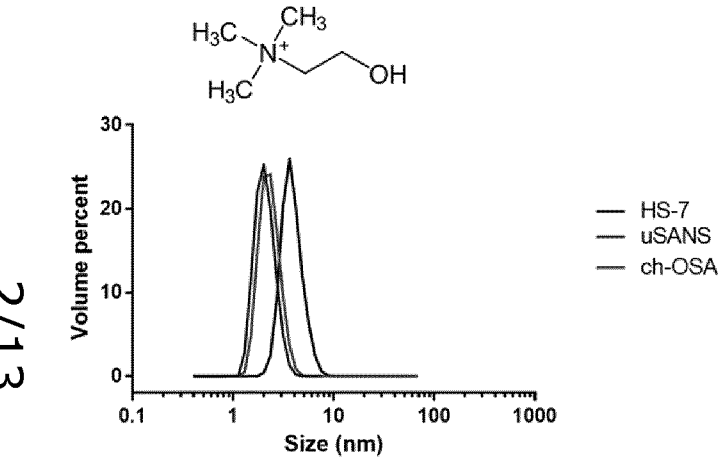


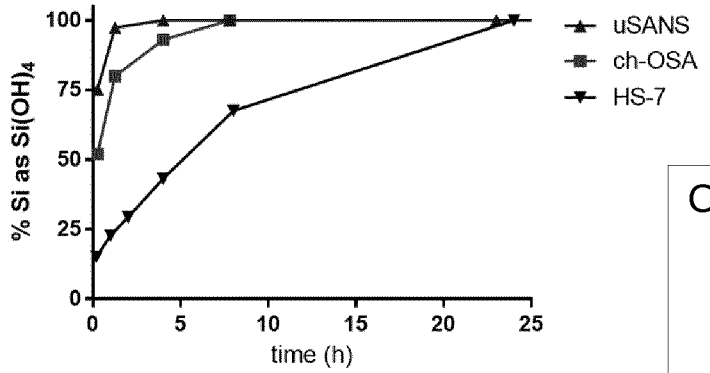


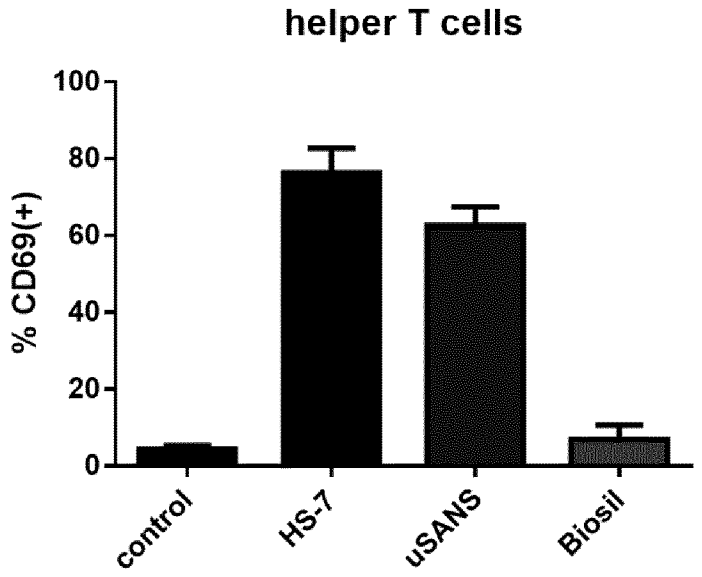
Kerek particles did not activate T cell to the order of HS-7 or uSANS.

Figure 2: T cell activation by various patented materials in PBMC

- The effect of ch-OSA® (choline-stabilized orthosilicic acid, BioSil™) on T cell activation was investigated







Ch-OSA also does not activate T cells.

Figure 3: CD4+ and CD8+ expression compared to Kerek

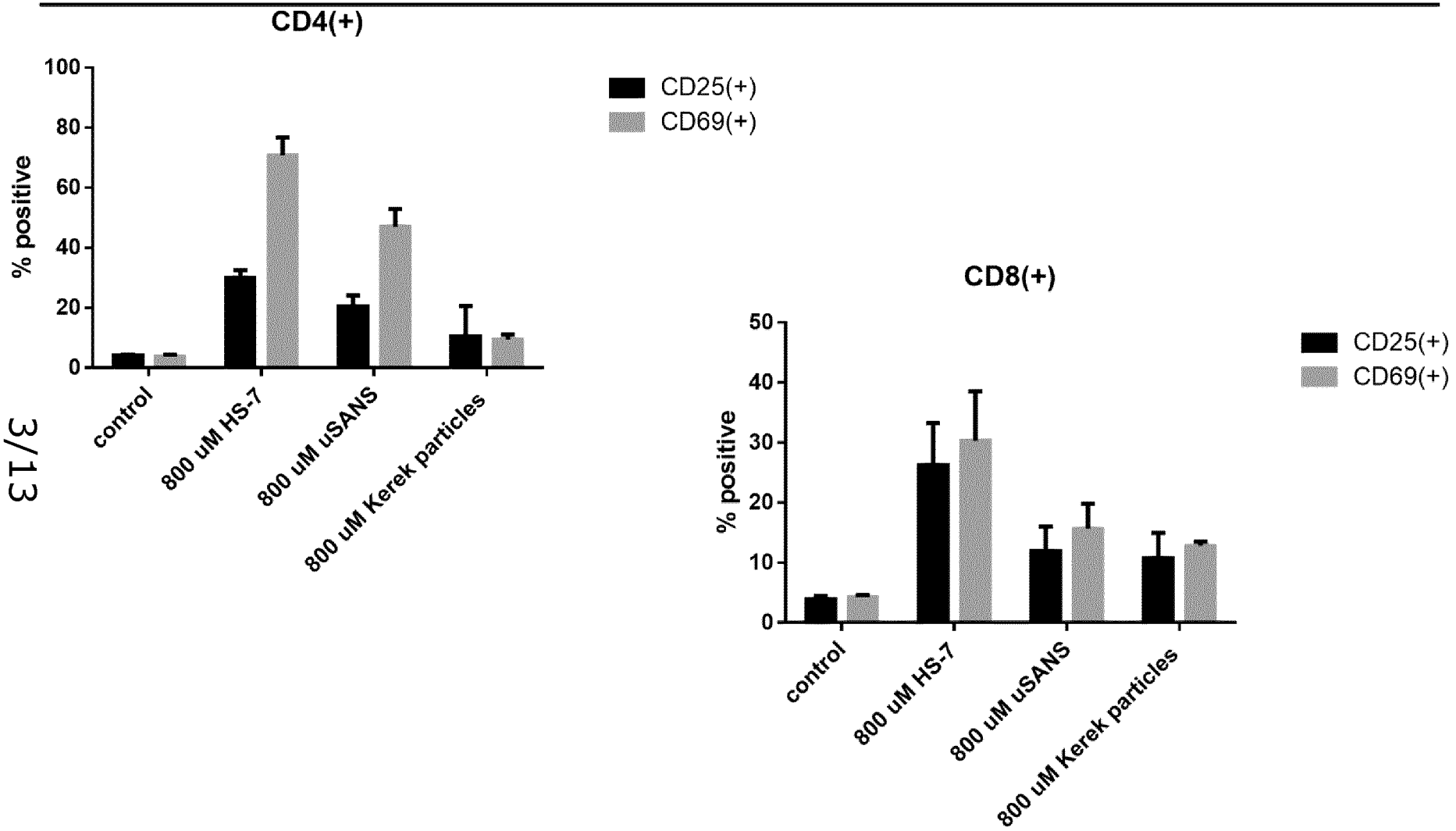


Figure 4: CD4+ and CD8+ expression compared to Kerek (+ positive control, SEB)

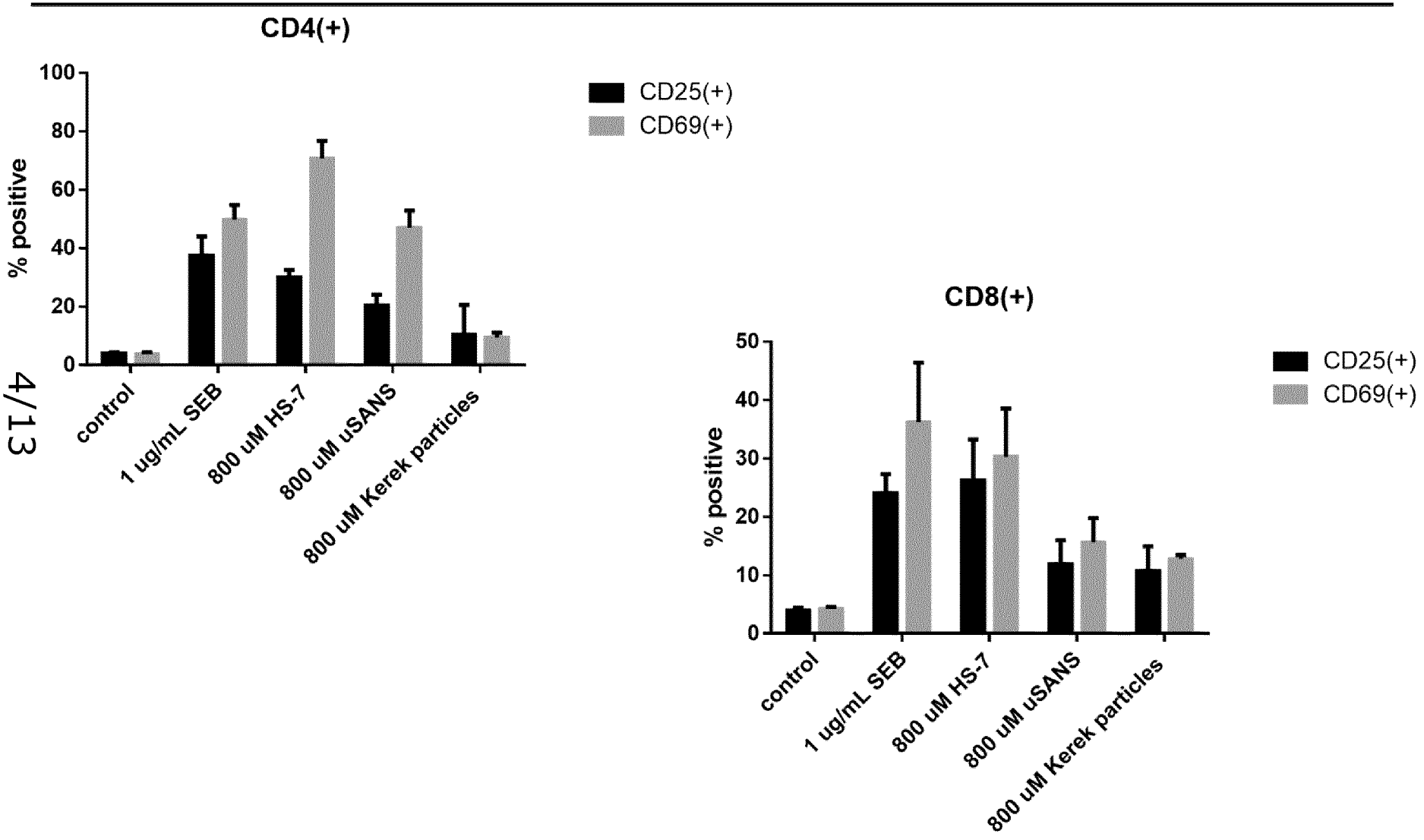


Figure 5: CD4+ and CD8+ expression compared to Biosil

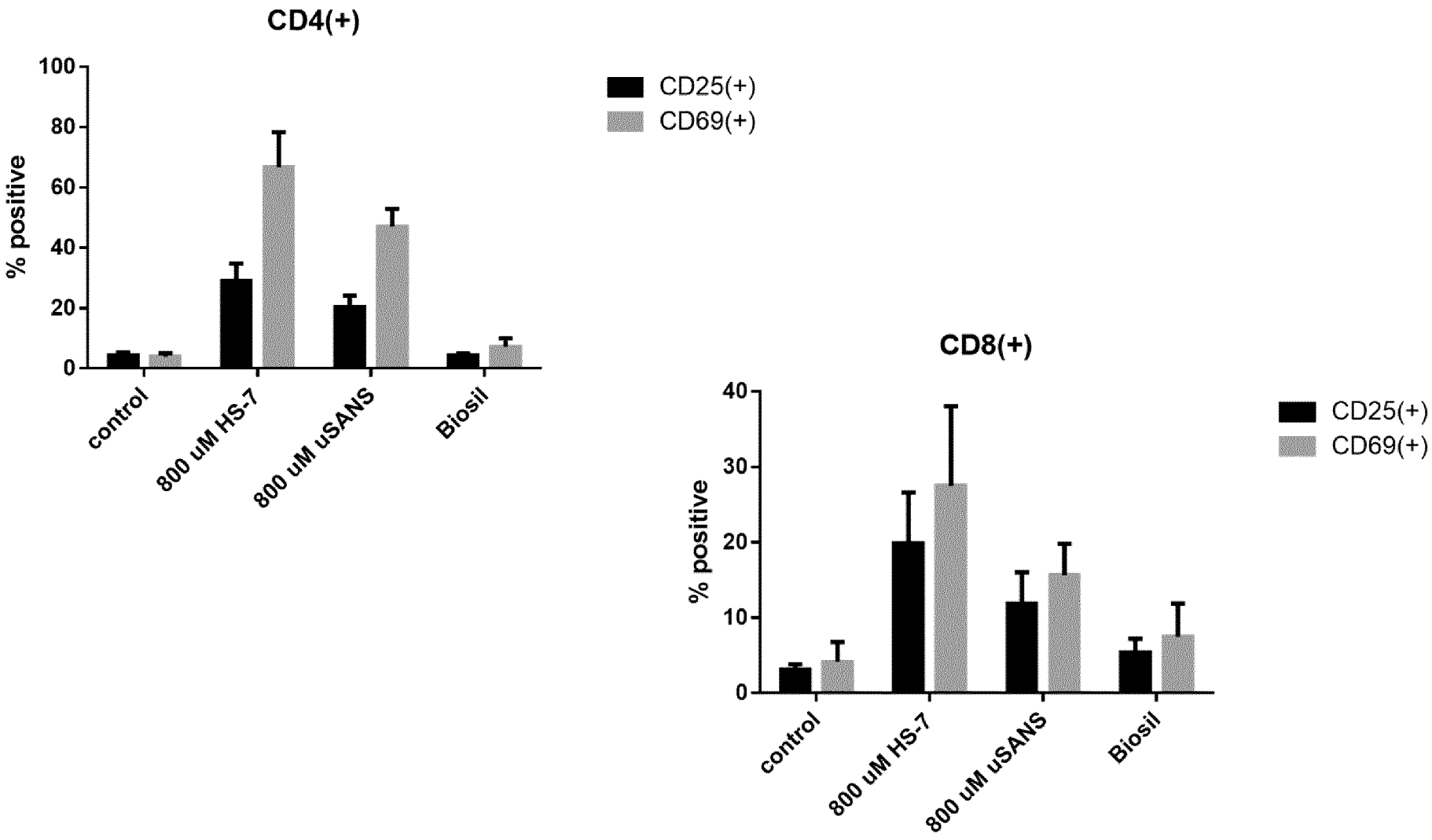


Figure 6: CD4 and CD8 expression compared to Biosil (+ positive control, SEB)

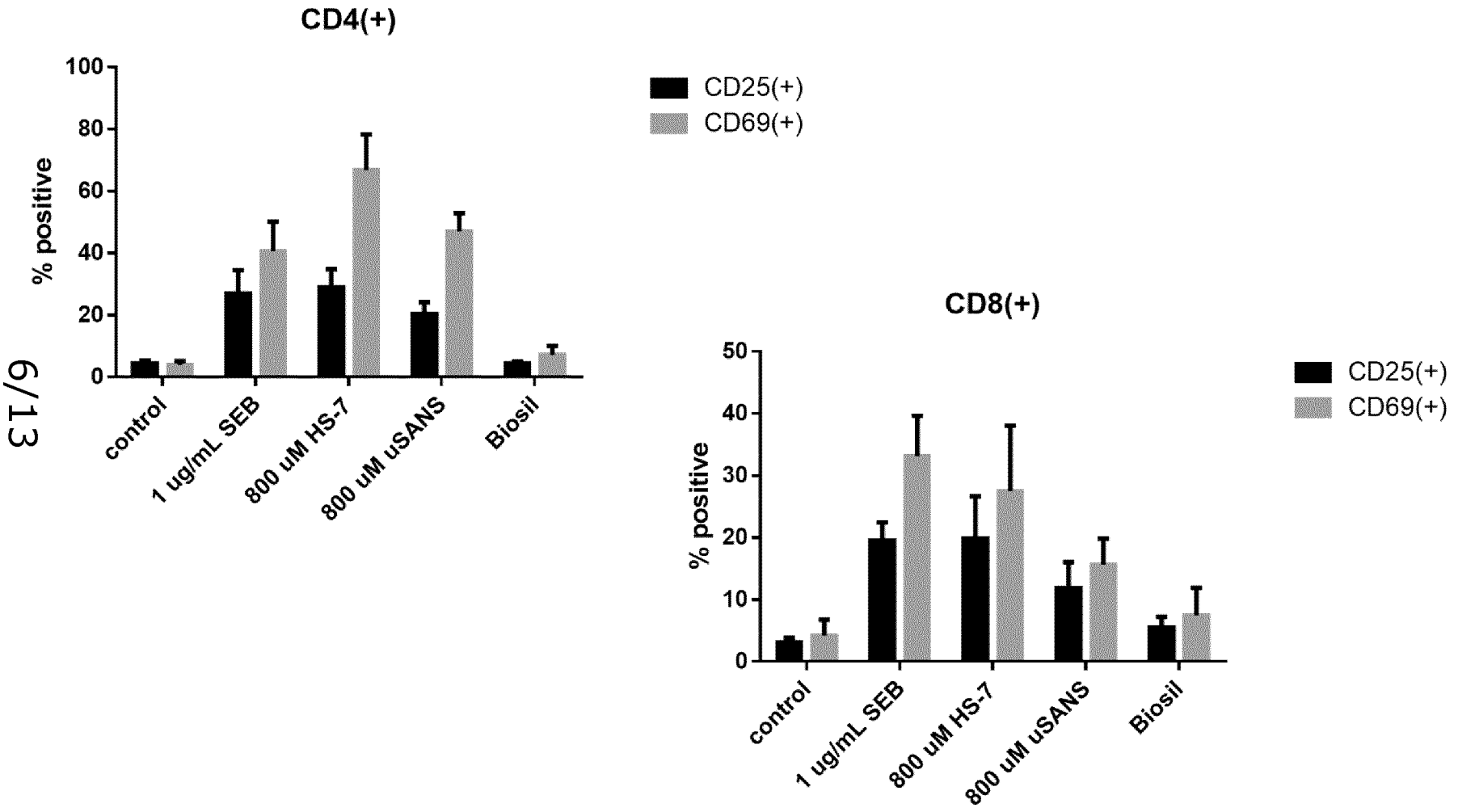


Figure 7. The activation of CD4 and CD8 T cells by ultrafine nanosilica of differing sizes.

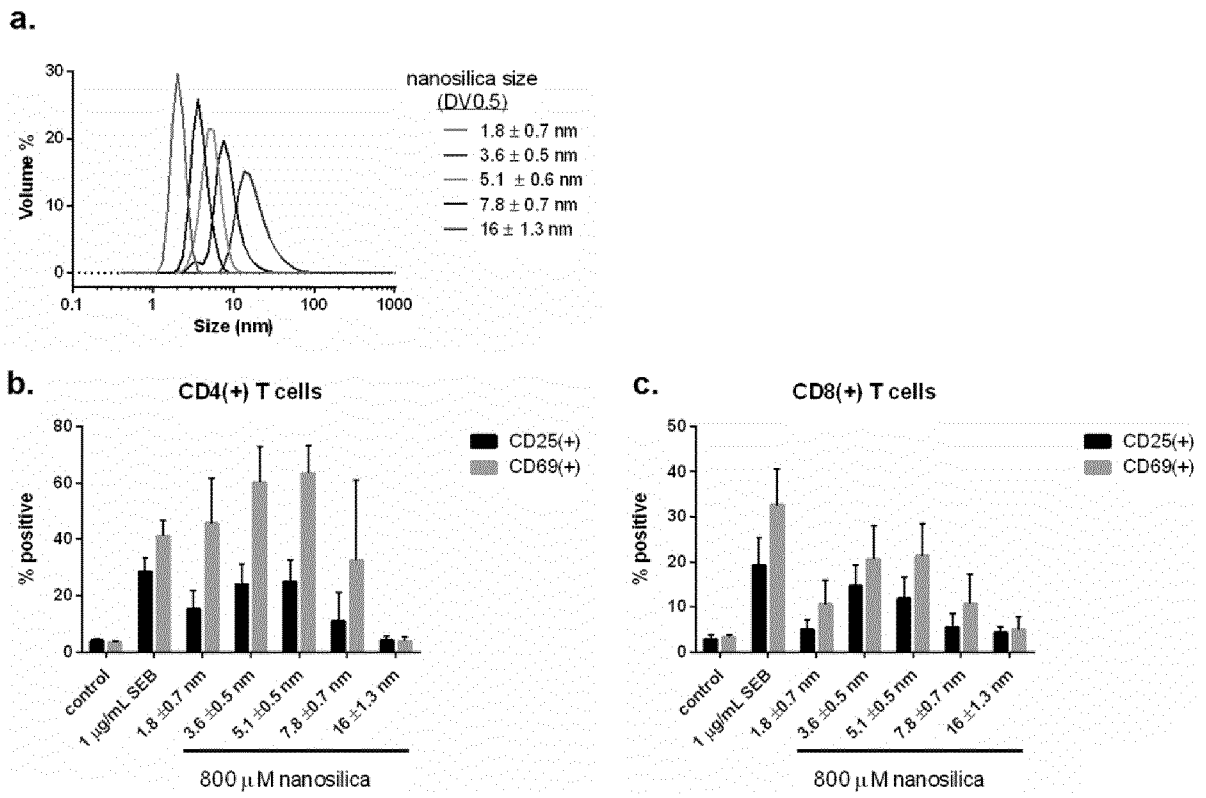


Figure 8. The activation of different Th lineage cell types by ultrafine nanosilica

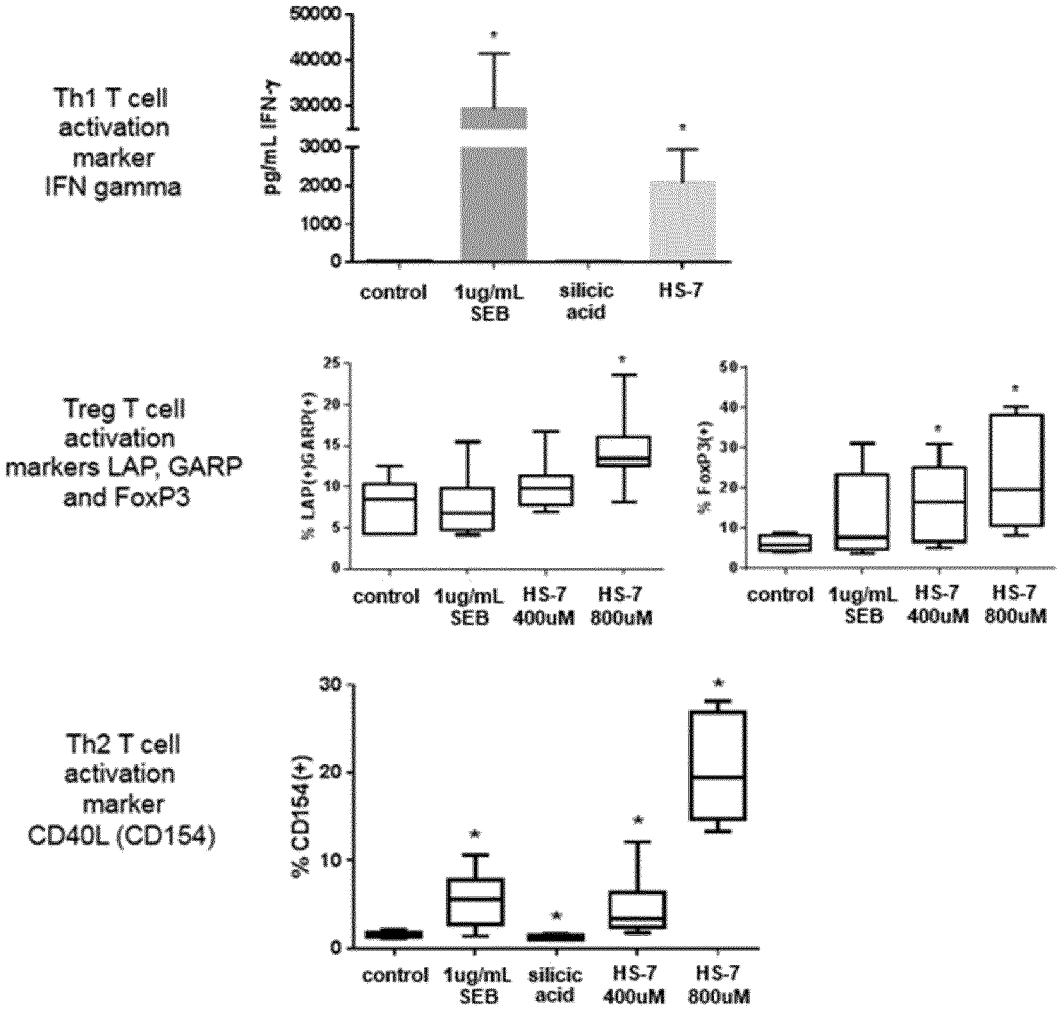


Figure 9. Toxicity of three different forms of nanosilica on endothelial vein cells.

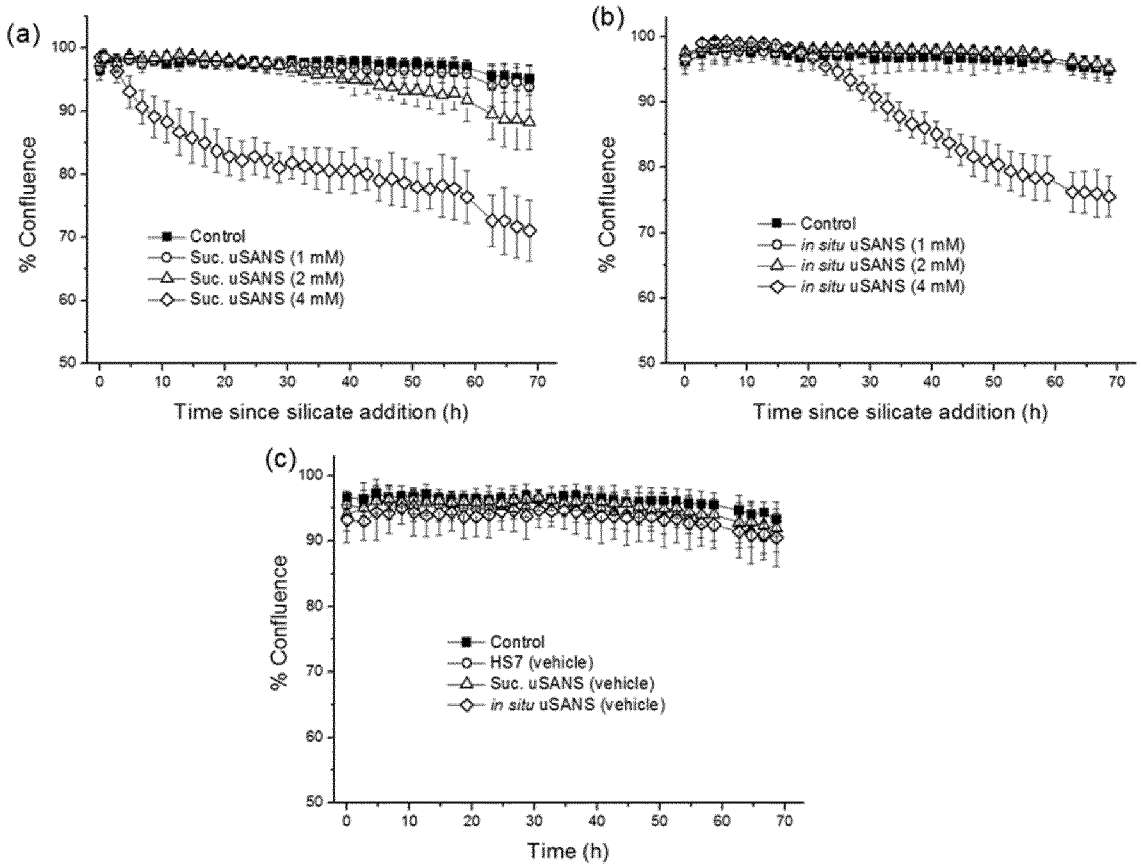


Figure 10. Very Rapid pZap70 induction in T cells by Nanosilica

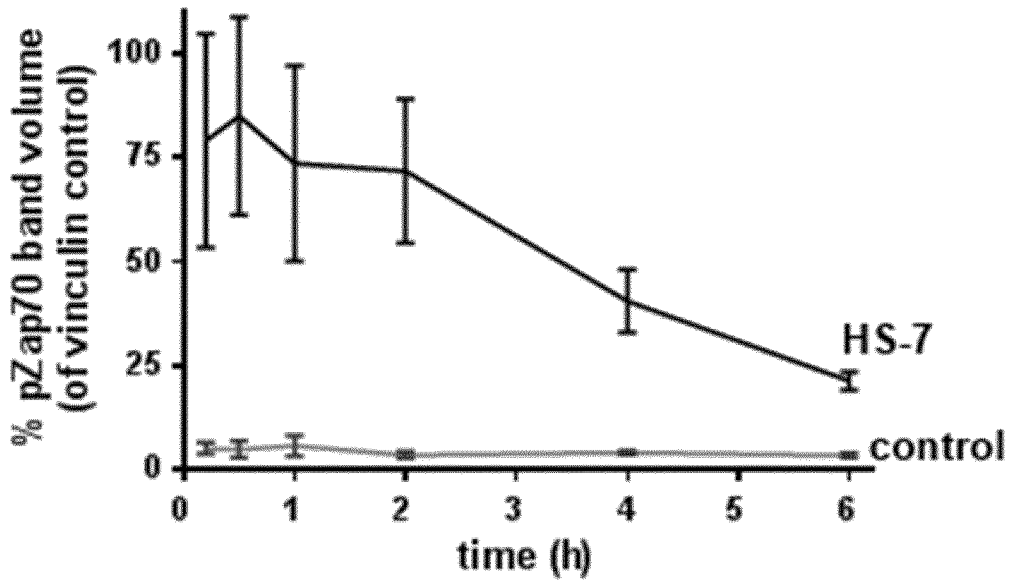


Figure 11. Chemical lability of uSANS during acidic storage as determined by a molybdate assay

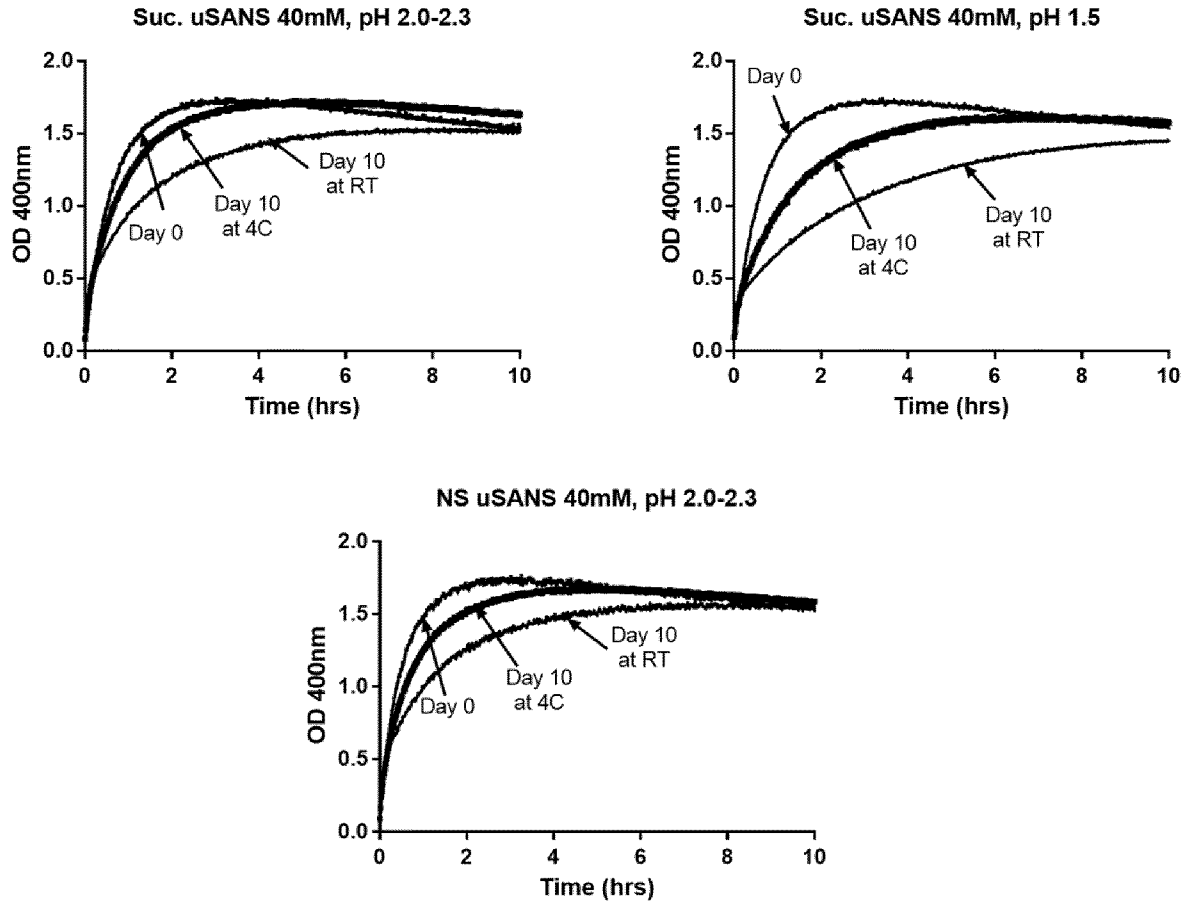


Figure 12. Chemical lability of uSANS over time upon neutralisation (pH 7).

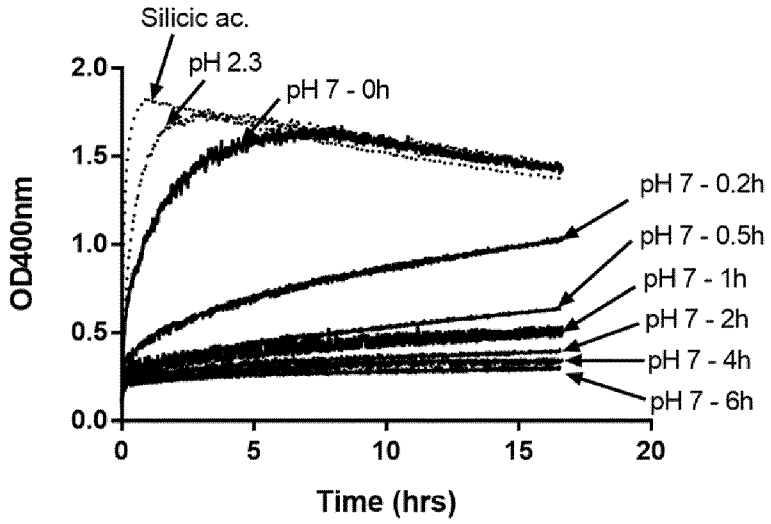


Figure 13. Chemical lability of *in situ* formed uSANS

