Electronic Supplementary Material (ESI) for Nanoscale.

SUPPLEMENTARY FIGURES

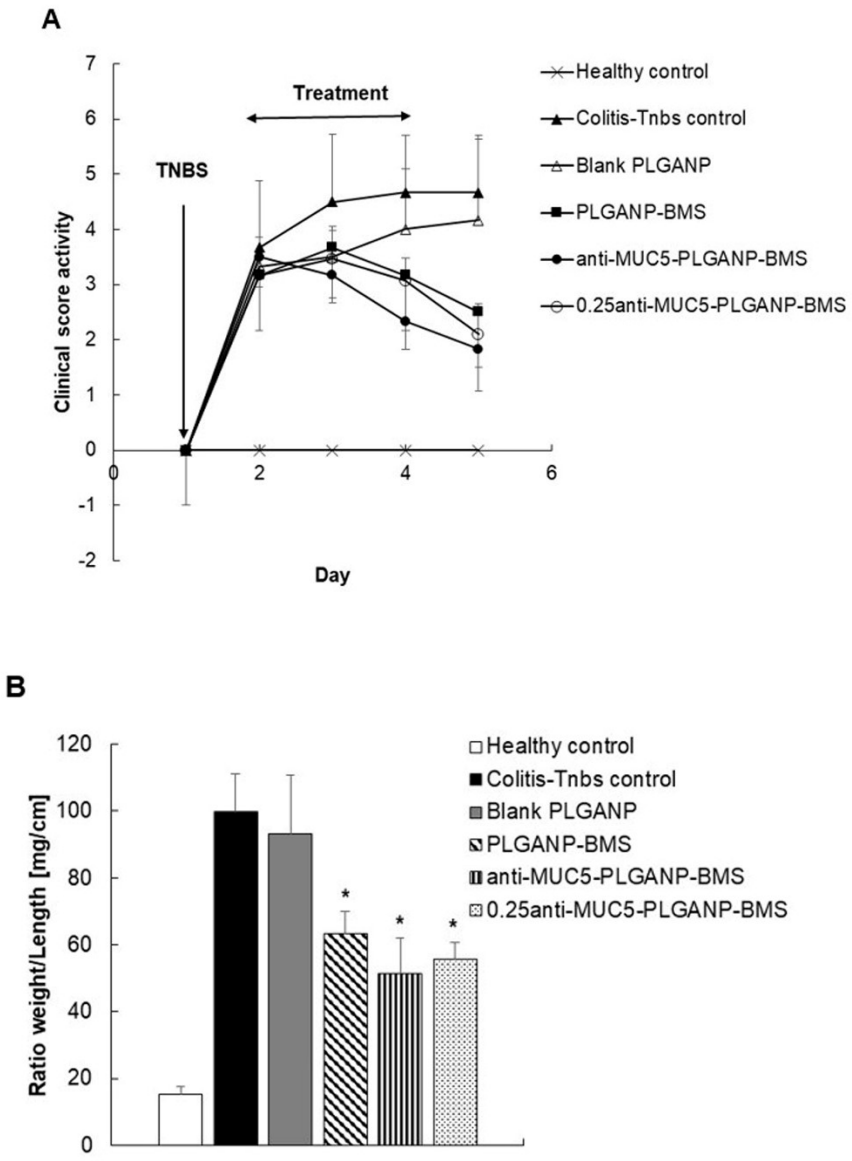

Figure S-1: Therapeutic efficiency of the administrated PLGANPs and anti-MUC5 conjugates (two concentrations of anti-MUC5) in murine TNBS induced colitis.

A: Clinical activity score during the whole experimental period after rectal formulations administration.

B: Colon/body weight ratio after treatment of PLGANPs and anti-MUC5 conjugates. All treatments were significantly different from colitis control (Mean ± SD; n=6; *p<0.05).

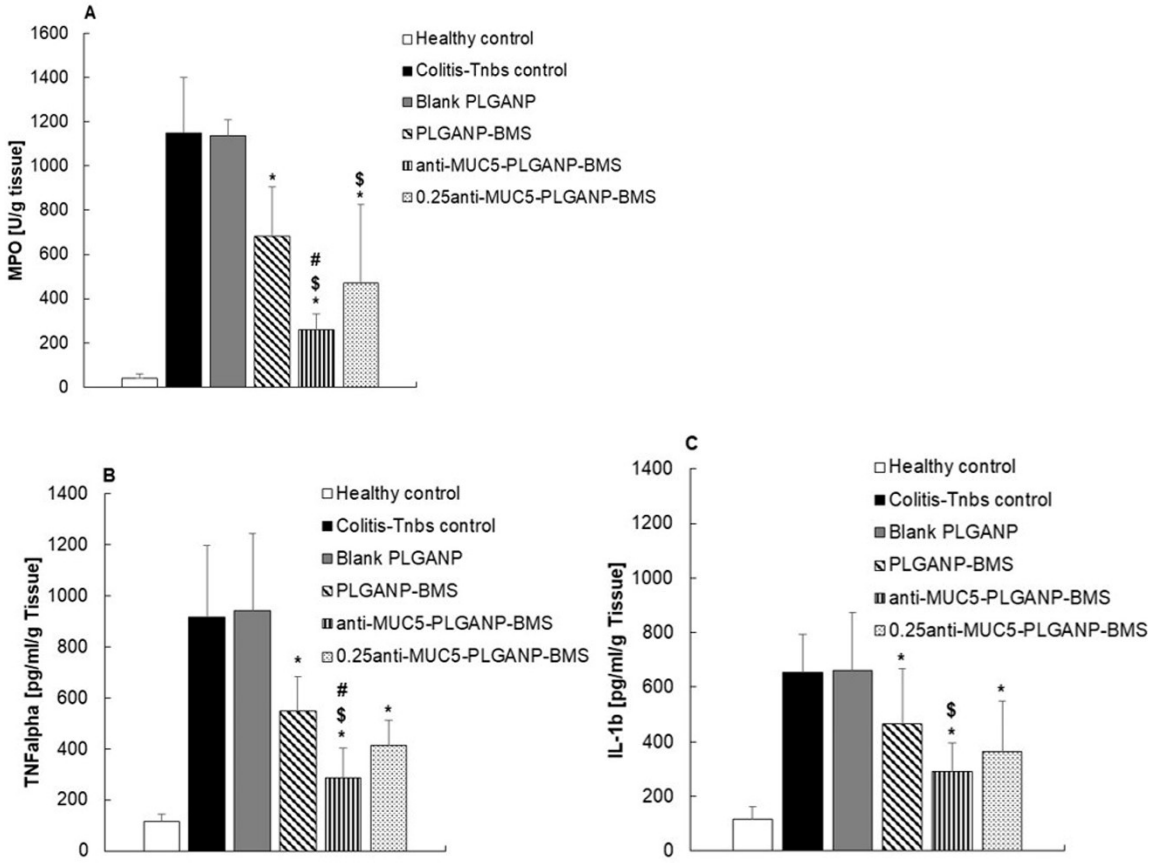

Figure S-2: MPO (A) and pro-inflammatory cytokines (B = TNF-α; C = IL-1β) activities after treatment of PLGANPs and anti-MUC5 conjugates (two concentrations of anti-MUC5).

A: Compared to the colitis control group the BMS loaded PLGANPs show a lower activity of the MPO as a parameter of the inflammation. The anti-MUC5 conjugates showed the lowest activity.

B: The untreated colitis-group showed elevated concentrations of TNF-α in the tissue indicating the active inflammation. Blank and unloaded PLGA-NP also showed high concentrations of TNF-α compared the groups with BMS loaded PLGANPs. anti-MUC5 conjugates reduced the TNF-α levels the most.

C: Compared to the healthy control the colitis groups showed high levels of IL-1β in the tissue. Treatment with BMS-containing PLGANPs showed significant lower concentrations of the cytokine.

All treatments were significantly different from colitis control (Mean ± SD; n=6; # $p<0.05$ compared to PLGANP-BMS, \$ $p<0.05$ compared to 0.25AMUC5AC-PLGANP-BMS.