

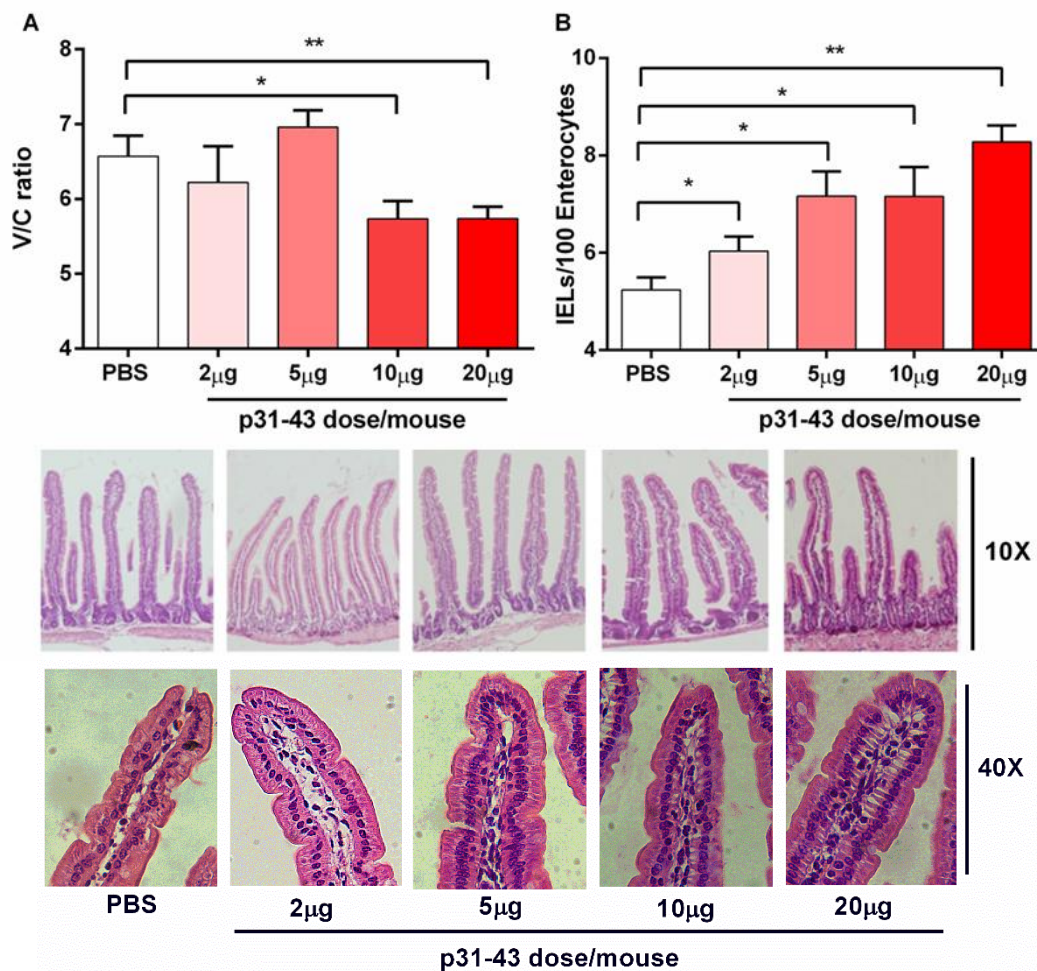
Supplementary Material

p31-43 gliadin peptide forms oligomers and induces NLRP3 inflammasome/ caspase 1-dependent mucosal damage in small intestine

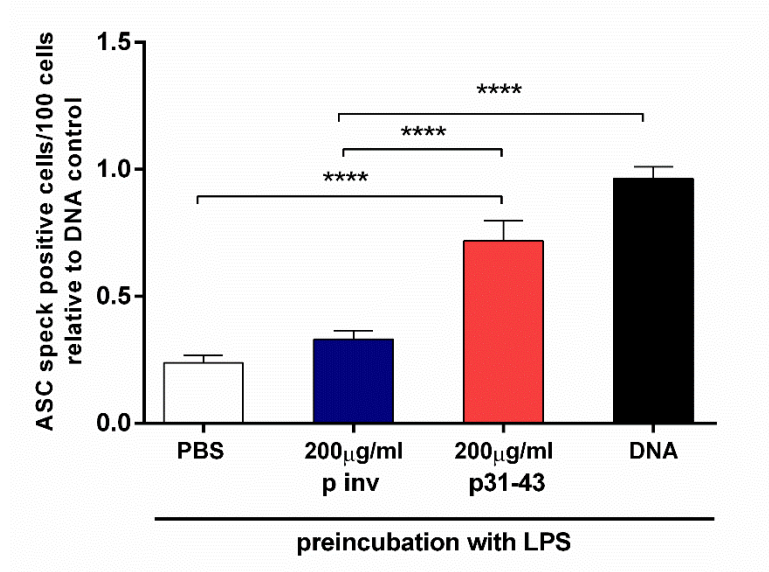
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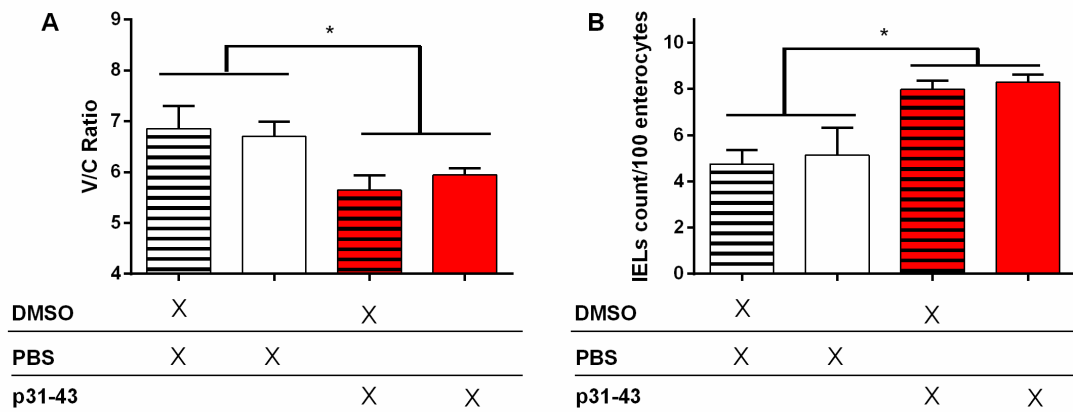
Supplementary figures



Supplementary Figure 1. Dose dependent induction of enteropathy by feeding p31-43. C57BL/6 mice received 2, 5, 10 or 20µg p31-43 or PBS by oral gavage and enteropathy was assessed 16hr later by counting the number of intraepithelial lymphocytes/100 enterocytes (A) and by measuring the ratio between villus length and crypt depth (V/C) (B) in H&E stained sections of paraffin-embedded proximal small intestine. Results shown are means \pm 1 SEM for 5 mice/group. * $p < 0.05$, ANOVA. (C) Representative H&E stained sections.



Supplementary Figure 2. ASC speck formation is not induced by inverted peptide. Human THP-1 ASC speck reporter cells were preconditioned for 3h with LPS before addition of 200μg/ml p31-43 or inverted peptide for a further 16h. Positive control cells (DNA) were transfected transiently with bacterial plasmid before addition of LPS. Cells showing ASC specks were assessed by immunofluorescence and expressed as positive cells/100 total cells. Results shown are means \pm 1 SEM for three replicates/group. ****p<0.0001, ANOVA.



Supplementary Figure 3. Enteropathy induced by p31-43 is not prevented by DMSO. Villus/crypt ratios (A) and intraepithelial lymphocyte counts (B) in the proximal small intestine of C57BL/6 mice fed 20μg p31-43 or PBS that had been treated i.p. 30 minutes earlier with DMSO. Results shown are means \pm 1 SEM for 5 mice/group assessed 16hr after feeding p31-43. *p<0.05, ANOVA.