

Supplementary Figure 1: Patient characteristics

(A) Patient characteristics of the IBD patients and colorectal cancer controls used in the intestinal tissue homogenate study. MMP9 **(B)** and MPO levels **(C)** of inflamed (n=50) and non-inflamed (n=42) intestinal tissue homogenates of IBD patients and colorectal cancer controls (n=20). Individual values are shown and horizontal lines represent mean values. Statistical significances were calculated with a Mann Whitney and Wilcoxon signed rank test. This is a subset of data that was previously reported in reference 18. **(D)** Characteristics of the IBD patients and healthy controls in the PMN study.

Supplementary Figure 2: LTB₄ levels in IBD

LTB₄ levels in colorectal cancer controls (n=18-19), and IBD patients (inflamed, n=41; non-inflamed, n=35). Individual values are shown and horizontal lines represent mean values.

Supplementary Figure 3: Protease release and PGP generation by healthy control PMNs upon LPS stimulation

10⁵ freshly isolated PMNs from healthy controls were incubated for 6 hours with medium or LPS (10 ng/mL). PMNs release higher levels of MMP-8 **(A, n=11)**, MMP9 **(B, n=11)** and PE activity **(C, n=12)** when stimulated with LPS. Conditioned medium from LPS stimulated PMNs is far more capable to generate N-Ac-PGP **(D, n=8)** and PGP **(E, n=8)** to a lesser extent. Individual values are shown, connected by lines. Significances were calculated with Wilcoxon signed rank test. *, values above trend line were not used to calculate significance.

Supplementary Figure 4: Clinico-pathological signs of DSS-induced colitis

The bodyweight change **(A)** and DAI **(B)** of huCXCR2 knock-in mice treated with two day cycles of DSS over time (mean \pm SEM; day 0, n=41; day 1-4, n=33; day 5-6, n=25; day 7-8, n=17, day 9-15, n=9; day 15-19, n=6; day 20-21, n=3). The length of the colon **(C)**, histopathological score **(D)**, and intestinal MPO level **(E)** during these cycles (mean + SEM, n=3-8). *, P<0.05 vs day 0 (control); ** P<0.01 vs day 0. Statistical analysis done by one-way ANOVA followed by Dunnett's Multiple Comparison Test.

Supplementary Figure 5: Intestinal LTB₄, CXCL1 and CXCL2 levels in DSS-induced colitis

Intestinal LTB₄ levels **(A)**, CXCL1 **(B)** and CXCL2 **(C)** levels of huCXCR2 knock-in mice treated with 1.5% DSS over time All mean + SEM, n=3. Statistical analysis done by one-way ANOVA followed by Dunnett's Multiple Comparison Test. * P<0.05 vs day 0 (control).

Supplementary Figure 6: PGP neutralization reduces intestinal CXCL1 and CXCL2 levels

huCXCR2 knock-in mice were treated with 1.5% (w/v) DSS for 5 days, and daily treatment until day 7 (sacrifice). CXCL1 **(A)** and CXCL2 **(B)** levels were measured in intestinal tissue homogenates. All mean + SEM, n=8. Significance determined by two-tailed Student t-test, RTR versus PBS, anti-PGP antibody versus isotype-antibody.

* P<0.05.

Supplementary Figure 7: PGP neutralization reduces intestinal total and active MMP9 levels

huCXCR2 knock-in mice were treated with 1.5% (w/v) DSS for 5 days, and daily treatment until day 7 (sacrifice). Total **(A)** and active MMP9 **(B)** levels were measured in intestinal tissue homogenates. All mean + SEM, n=8. Significance determined by two-tailed Student t-test, RTR versus PBS, anti-PGP antibody versus isotype-antibody.

* P<0.05; **, P<0.01.