

**SUPPLEMENTAL FIGURES**

**Supplemental Figure 1. GM-CSF Ab in IBD.** Serum GM-CSF autoantibody (GM-CSF Ab) concentration was determined by ELISA recognizing non-glycosylated GM-CSF in the pediatric (A1) and adult (A2) onset CD patients, UC patients, and healthy controls (CTRL) summarized in Table I (n = 354 IBD and 108 controls). \* $p < 0.01$  vs. A1CTRL and A1UC, ^ $p < 0.01$  vs. A2 CD, \*\* $p < 0.01$  vs. A2 CTRL. Data are shown as the median(range).

**Supplemental Figure 2. GM-CSF Ab and CD Genotype and Duration of Disease.** Serum GM-CSF autoantibody (GM-CSF Ab) concentration was determined by ELISA recognizing glycosylated GM-CSF in the pediatric (A1) and adult (A2) onset CD patients summarized in Table I (n = 354 IBD and 108 controls). A) The genotype for the indicated CD susceptibility genetic polymorphisms was determined. The median(range) GM-CSF Ab concentration is shown as a function of genotype. \* $p < 0.01$  vs. *IRGM* SNP- CD. B) Serum GM-CSF Ab concentration is shown as a function of duration of disease in the pediatric onset CD patients. C) Serum GM-CSF Ab concentration is shown as a function of duration of disease in the adult onset CD patients.

**Supplemental Figure 3. Frequency of Ileal Lamina Propria Macrophages and T Lymphocytes in Experimental Ileitis and Newly Diagnosed CD.** The frequency of F4/80+ macrophages and CD3+ T lymphocytes was determined in ileal sections from the murine and human groups as indicated. WT: wild type, GMKO: *gm-csf* deficient, C15KO: *card15* deficient, PIR: received piroxicam, 200 ppm, in the chow, GM-CSF Ab: received neutralizing GM-CSF antibody, 50 mcg IP. CON: healthy human controls, CD: newly diagnosed CD. Images representative of at least four per group are shown. \* $p < 0.001$  vs. control with same genotype; \*\* $p = 0.06$  vs. C15KO control.

## SUPPLEMENTAL TABLE

Supplemental Table I. Patient Characteristics.

<b>Diagnosis</b>	<b>n</b>	<b>Age Median (range)</b>	<b>Gender (male)</b>	<b>Duration Median(range)</b>	<b>Stricturing/Penetrating Behavior</b>
A1 Ileal CD	24	13(5,18)	79	2(0,8)	46
A1 Ileo-colonic CD	132	12(1,19)	59	2(0,16)	34
A1 Colon-only CD	73	12(2,18)	63	3(0,25)	12
A1 Ulcerative Colitis	43	12(2,16)	61	4(1,16)	not applicable
A2 Ileal CD	17	30(23,53)	53	7(1,23)	76
A2 Ileo-colonic CD	28	36(21,68)	46	13(2,23)	68
A2 Colon-only CD	12	41(24,64)	42	11(2,37)	33
A2 Ulcerative Colitis	25	38(21,71)	64	8(1,21)	not applicable
CD Subset*	21	12(4,17)	76	2(1,8)	33

\*subset of CD patients used to determine neutrophil functional data;

male gender and stricturing/penetrating behavior are relative frequencies, disease duration is in years.

Fig S1

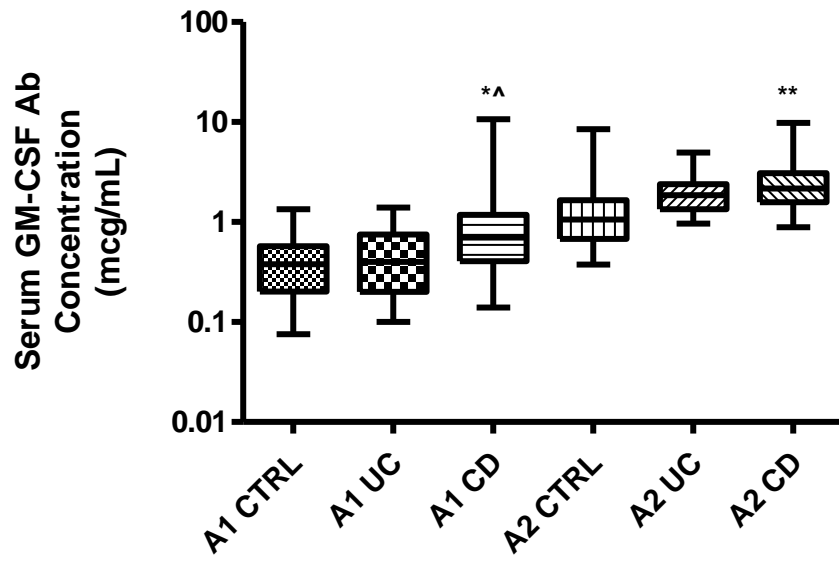
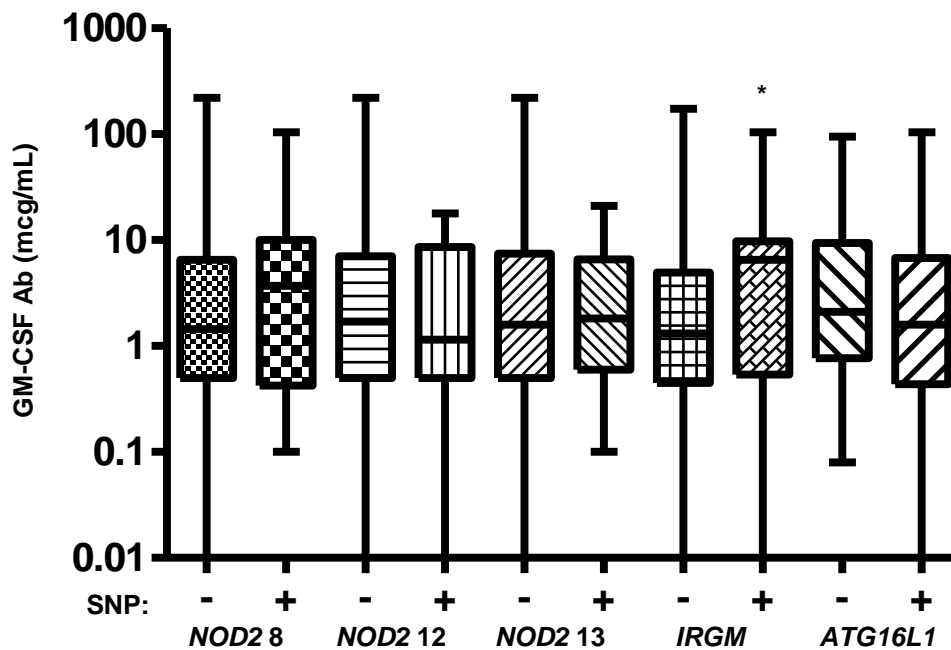
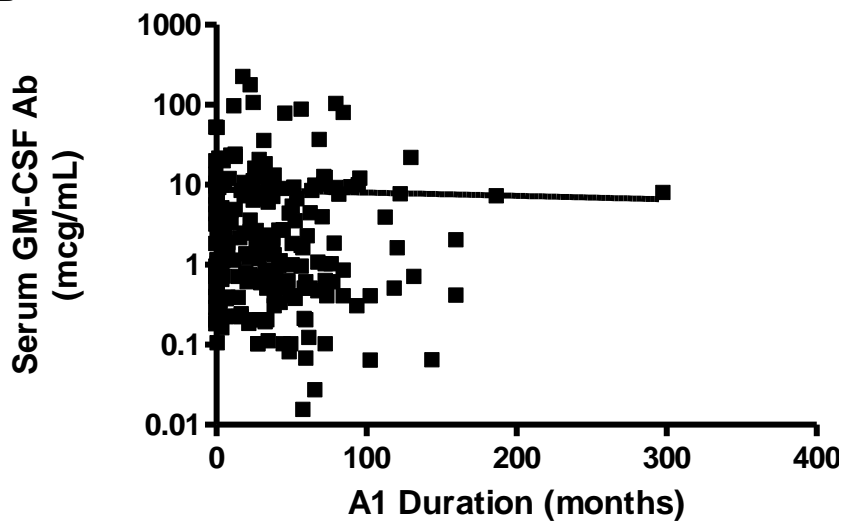


Fig S2

A



B



C

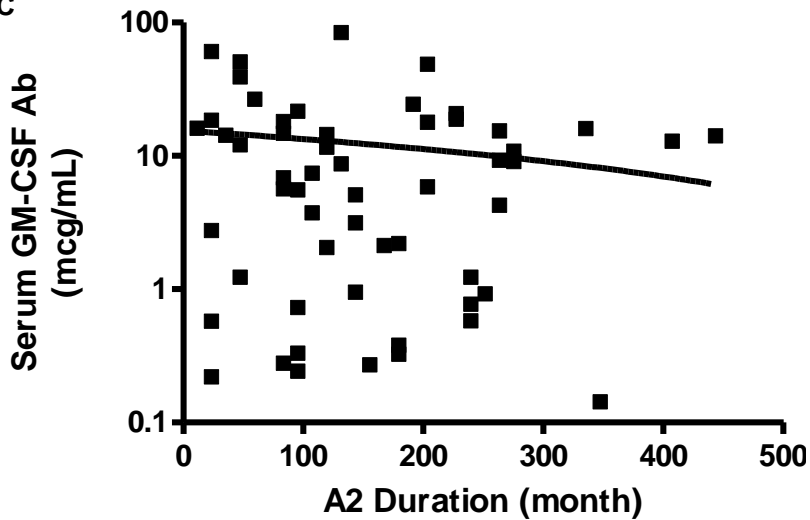
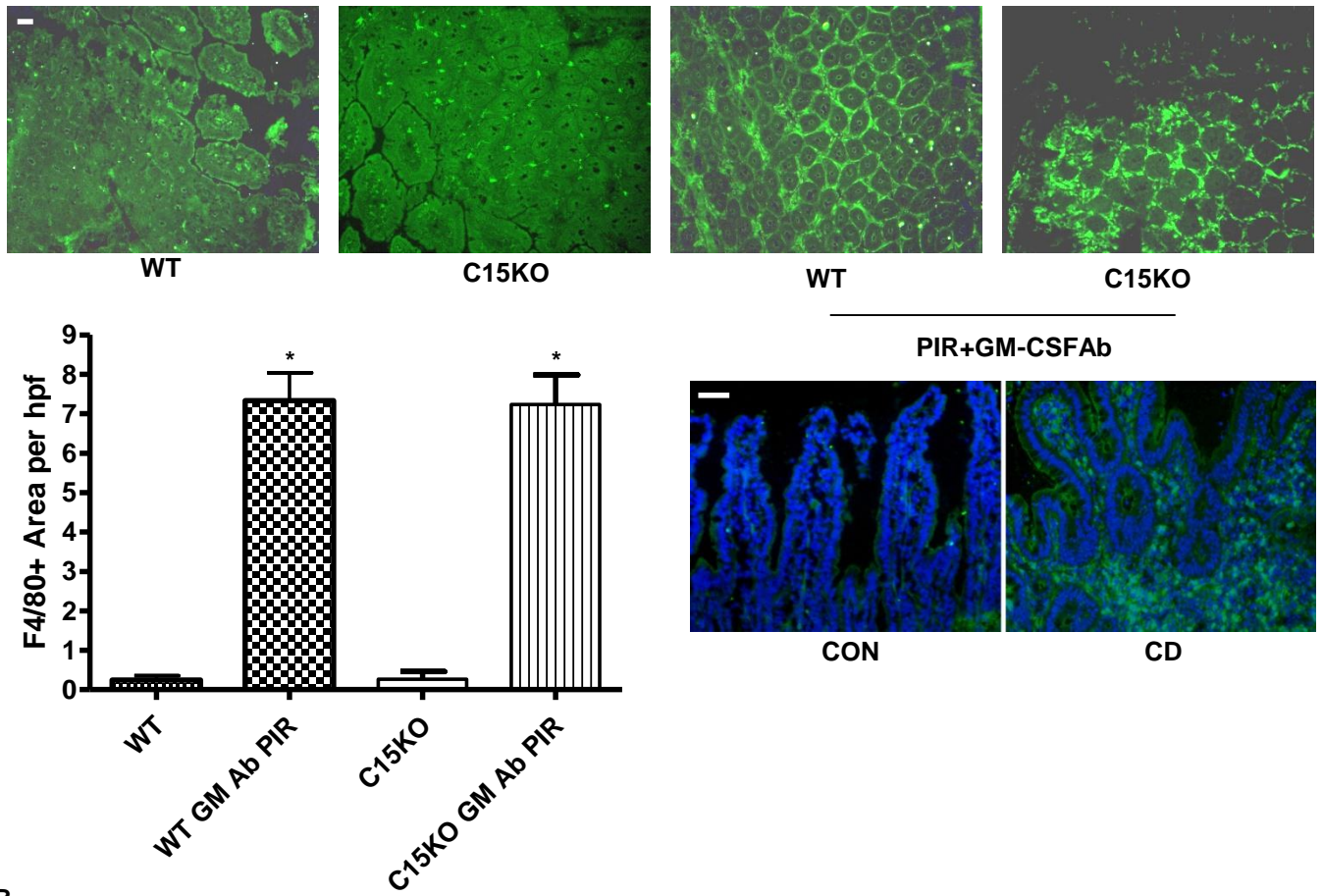


Fig S3

A



B

