

S1 Table. Gene expression assays.

	Gene	Assay ID^a
Reference genes	<i>CASC3</i>	Hs00201226_m1
	<i>POP4</i>	Hs00198357_m1
	<i>UBA52</i>	Hs03004332_g1
IBD candidate genes	<i>CSF3</i>	Hs00357085_g1
	<i>ERBB2</i>	Hs01001580_m1
	<i>GRB7</i>	Hs00918009_g1
	<i>GSDMA</i>	Hs00937853_m1
	<i>GSDMB</i>	Hs00218565_m1
	<i>IKZF3</i>	Hs00232635_m1
	<i>LRRC3C</i>	custom-made assay
	<i>MED24</i>	Hs00207863_m1
	<i>MIEN1</i>	Hs00260553_m1
	<i>ORMDL3</i>	Hs00918021_m1
	<i>PGAP3</i>	Hs00544681_m1
	<i>PSMD3</i>	Hs00160646_m1
	<i>ZBP2</i>	Hs00418432_m1

^a Assay identification number according to Life Technologies,

Carlsbad, CA, USA. Primer and probe sequences of the custom-made assay for *LRRC3C* are available upon request.

S2 Table. Drug-mediated effects on gene expression in colonic IBD biopsy samples.

Genes^d	Non-inflamed IBD colon			Inflamed IBD colon		
	TP vs. no TP ^a	AS vs. no AS ^b	CS vs. no CS ^c	TP vs. no TP ^a	AS vs. no AS ^b	CS vs. no CS ^c
	(7 vs. 22)	(14 vs. 15)	(8 vs. 21)	(9 vs. 19)	(15 vs. 13)	(12 vs. 16)
	<i>P</i> -value	<i>P</i> -value	<i>P</i> -value	<i>P</i> -value	<i>P</i> -value	<i>P</i> -value
<i>PGAP3</i>	0.78	0.45	0.40	0.16	0.47	0.13
<i>ERBB2</i>	0.67	0.53	0.10	0.29	0.029	0.13
<i>MIEN1</i>	0.33	0.75	0.49	0.92	0.62	0.40
<i>GRB7</i>	0.90	0.65	0.35	0.22	0.27	0.80
<i>IKZF3</i>	0.71	0.026	0.047	0.96	1.00	0.28
<i>ZPBP2</i>	0.50	0.093	0.021	0.89	0.89	0.98
<i>GSDMB</i>	0.20	0.65	0.79	1.00	0.052	0.16
<i>ORMDL3</i>	0.088	0.40	0.40	0.50	0.75	0.95
<i>LRRC3C</i>	0.26	0.81	0.46	0.56	0.72	0.090
<i>GSDMA</i>	0.50	0.81	0.98	0.31	0.59	0.10
<i>PSMD3</i>	0.53	0.68	0.76	0.41	0.16	0.21
<i>CSF3</i>	0.98	0.95	0.40	0.85	0.79	0.70
<i>MED24</i>	0.86	0.38	0.28	1.00	0.79	0.13

^a Thiopurine (TP) treatment vs. no TP treatment.

^b Aminosalicylate (AS) treatment vs. no AS treatment.

^c Corticosteroid (CS) treatment vs. no CS treatment.

^d Genes have been arranged (top to bottom) in the order in which they are positioned along the chromosome, and the risk locus (rs2872507) is located between *ZPBP2* and *GSDMB* (closer to *ZPBP2*).

S3 Table. Differential gene expression in relation to colonic sampling locations.

Genes^a	P-value^b	Fold change^c
<i>PGAP3</i>	0.21	1.21
<i>ERBB2</i>	6.7×10^{-03}	1.36
<i>MIEN1</i>	0.060	1.22
<i>GRB7</i>	0.32	1.14
<i>IKZF3</i>	0.46	1.29
<i>ZPBP2</i>	0.92	1.30
<i>GSDMB</i>	0.050	1.45
<i>ORMDL3</i>	0.27	1.16
<i>LRRC3C</i>	0.41	1.81
<i>GSDMA</i>	0.47	1.94
<i>PSMD3</i>	0.11	1.16
<i>CSF3</i>	0.56	1.42
<i>MED24</i>	0.31	1.43

^a Genes have been arranged (top to bottom) in the order in which they are positioned along the chromosome.

^b Biopsy samples from ascending colon (n = 13), transverse colon (n = 11), descending colon (n = 10), and sigmoid colon (n = 23) from the non-inflamed intestinal mucosa of individuals without IBD. Caecum and rectum were excluded because of a low number of samples.

^c Fold change for the colonic segment with highest expression compared to the colonic segment with the lowest expression.

S4 Table. Differential gene expression in colonic vs. ileal biopsies from non-inflamed, non-IBD mucosa.

Genes^a	P-value	Fold change^b
<i>PGAP3</i>	0.053	-1.21
<i>ERBB2</i>	0.15	1.08
<i>MIEN1</i>	7.1×10^{-03}	-1.21
<i>GRB7</i>	0.69	-1.03
<i>IKZF3</i>	1.7×10^{-04}	2.23
<i>ZPBP2</i>	0.013	2.56
<i>GSDMB</i>	0.16	1.18
<i>ORMDL3</i>	1.8×10^{-05}	1.34
<i>LRRC3C</i>	2.2×10^{-04}	-3.85
<i>GSDMA</i>	0.056	-1.31
<i>PSMD3</i>	6.2×10^{-07}	-1.34
<i>CSF3</i>	0.97	1.39
<i>MED24</i>	0.63	1.03

^a Genes have been arranged (top to bottom) in the order in which they are positioned along the chromosome.

^b A negative fold change indicates reduced expression in the ileum compared with that in the colon.