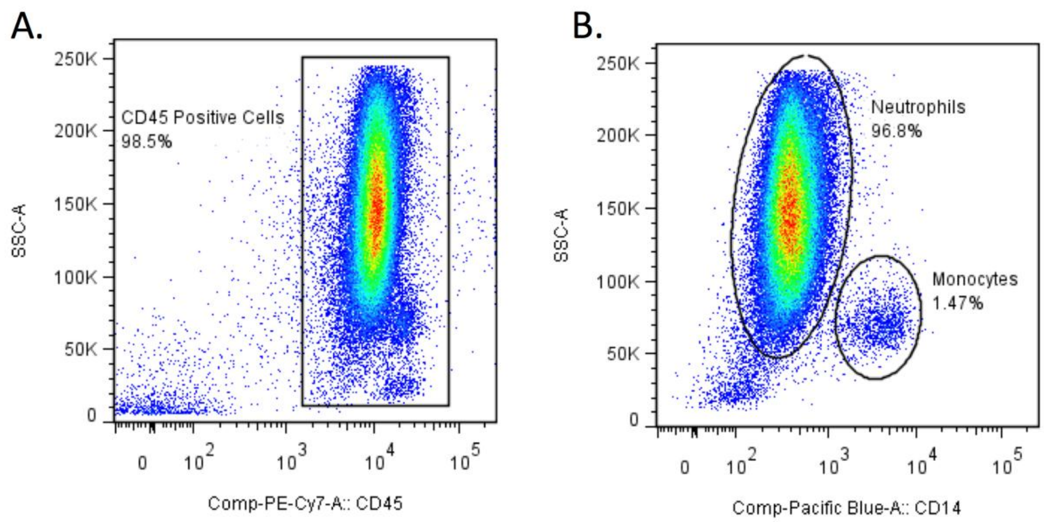
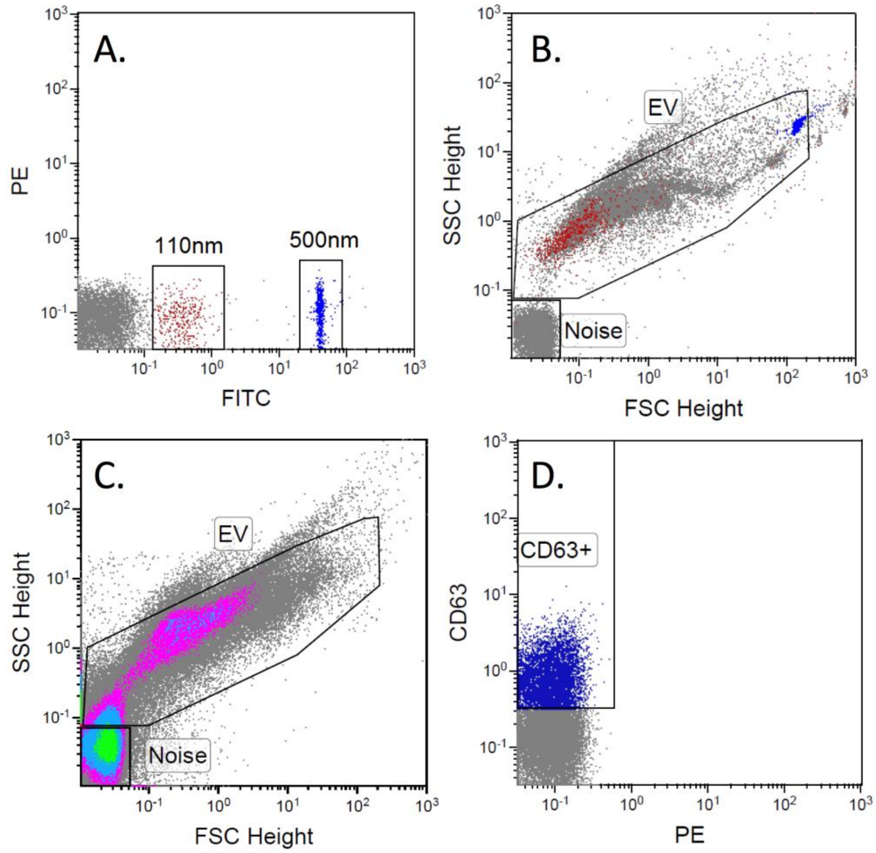
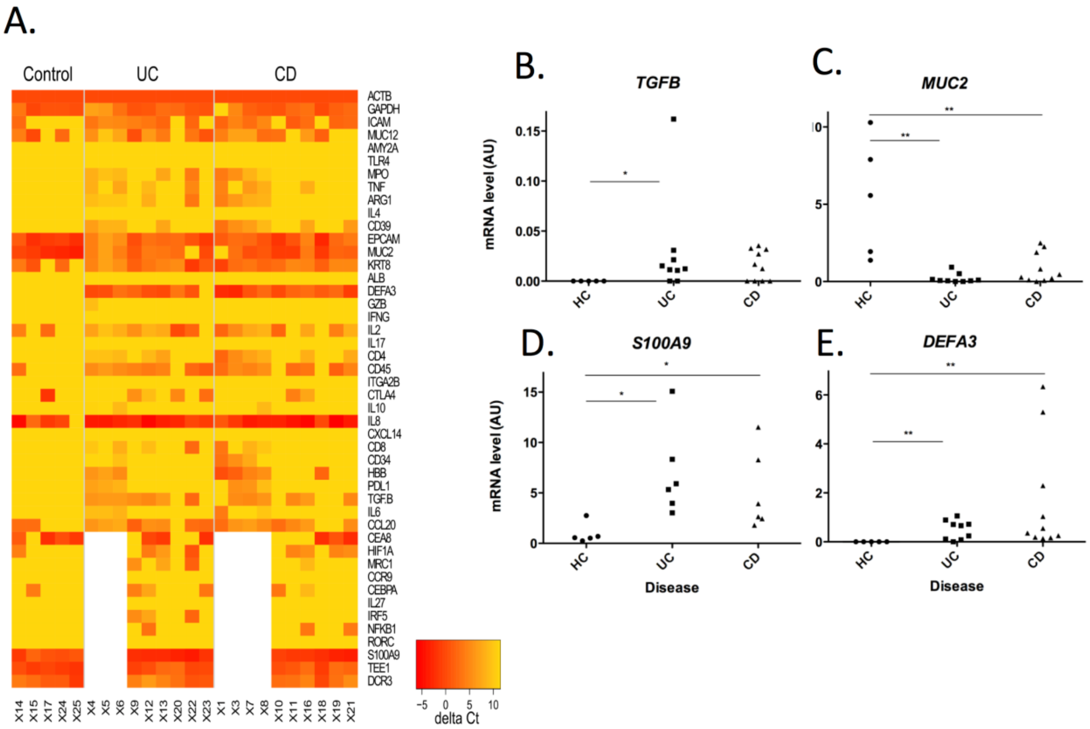


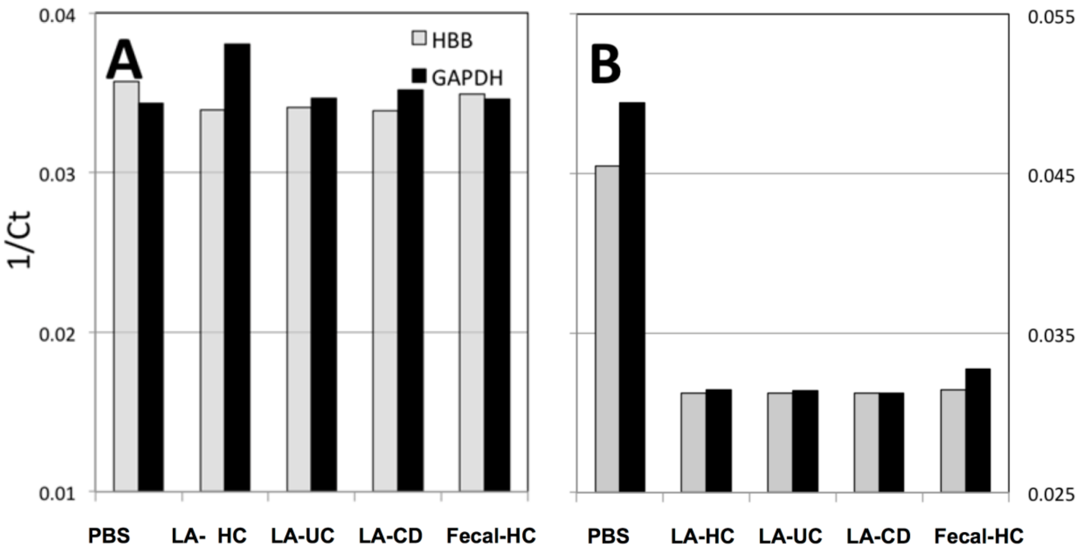
Supplementary Figure 1. Flow cytometry of the cellular fraction of luminal aspirates. Luminal aspirates were centrifuged to isolate the cellular components, and labelled with anti-CD45 and anti-14 antibodies to identify neutrophils and monocytes. **(A)** All cells / ungated. **(B)** CD45+ cells from outlined gate in **(A).** CD14 high/positive was labeled as monocytes and CD14 low/negative was labeled as neutrophils.



Supplementary Figure 2. Particle-size-based gating strategy. The *ApogeeMix* was subjected to flow cytometric analysis. The EV gate was designed to include both population of fluorescent beads (110nm and 500nm) and the area that are most likely show particles smaller than 500nm **(A & B). (C)** Representative colonic EV sample from IBD patients (41%). **(D)** CD63 positive gate was created based on the same sample single stained with anti-CD63 (18.4%).



Supplementary Figure. 3. Levels of EV mRNA in colonic samples from IBD patients and controls. **(A)** Heatmap of mRNA, normalized by ACTB, was compared among healthy control (HC), UC, and CD; yellow indicates lower expression and red indicates higher expression. **(B-E)** Scatter plots of mRNA levels (Arbitrary Unit, AU) in samples from healthy controls (HC, N=5), UC (N=9), and CD (N=10) patients, as assessed by RT-PCR.



Supplementary Figure 4. Stability of EV mRNA in LA and stool. **(A)** PBS, LA or fecal supernatants were incubated with fetal calf serum-derived purified standard EV at 37^{0}C for 30 minutes, then bovine Hemoglobin (HBB) and GAPDH mRNA levels (1/Ct) were quantified as described in the Methods. **(B)** Naked rat total RNA was incubated with PBS, LA, or fecal supernatants at 37^{0}C for 30 minutes, then rat ACTB *and* GAPDH mRNA levels (1/Ct) were quantified.

Supplementary Table 1.

Primer sequences used for PCR

Gene	Forward (5'-3')	Reverse (5'-3')
Human		
ACTB	CCTGGCACCCAGCACAAT	GCCGATCCACACGGAGTACT
GAPDH	CCCACTCCTCCACCTTTGAC	CATACCAGGAAATGAGCTTGACAA
MUC2	GCGGGACATTTGTCATGTACTC	GATGTGGGTGTAGGTGTGTGTCA
MUC12	GCCTTGAGAACGCCTACAACA	GAGCTCTGTGCCAGAGTCAACA
ICAM	TCCCCCCGGTATGAGATTG	GCCTGCAGTGCCCATTATG
EPCAM	CAGTTGTTGCTGGAATTGTTGTG	CATCTCACCCATCTCCTTTATCTCA
KRT8	CTGGGATGCAGAACATGAGTATTC	GCTTGTGAGGCCCCCATAG
EGFR	CCTTGCCGCAAAGTGTGTAA	TGAAGGAGTCACCCCTAAATGC
CEACEM8	AGTGCAGTGGCACGATCTCA	AAATTAGCCGGGCGTTGTG
MMP7	CGGATGGTAGCAGTCTAGGGATT	GGAATGTCCCATACCCAAAGAA
TFF1	CCCCAGCACGGTGATTAGTC	CAGAGCAGTCAATCTGTGTTGTGA
ALB	TGCAAGGCTGACGATAAGGA	GTAGGCTGAGATGCTTTTAAATGTGA
AMY2A	ACAGAGGATTCATTGTTTTCAACAAT	ACAGTATGTGCCAGCAGGAAGA
IL2	GAACTAAAGGGATCTGAAACAACATTC	TGTTGAGATGATGCTTTGACAAAA
IL4	CACAGGCACAAGCAGCTGAT	CCTTCACAGGACAGGAATTCAAG
IL17	CATGAACTCTGTCCCCATCCA	TCCAGCCGGAAGGAGTTG
IL27	CCAAGGCTGGGCACTCAGT	GATGCCAAGACTCCAGTCCTAAA
TNF	CGAAGGCTCCAAAGAAGACAGT	CAGGGCAATGATCCCAAAGT
TNFSF15	TGCGAAGTAGGTAGCAACTGGTT	CCATTAGCTTGTCCCCTTCTTG
DCR3	CAATGTGCCAGGCTCTTCCT	TCACACTCCTCAGCTCCTGGTA
GZB	GCGGTGGCTTCCTGATACAA	CCAAGGTGACATTTATGGAGCTT
MPO	ACTGCCTGGGTTCCAATCC	TGTTTAAGGAGGGTAATTTGCTCAA
DEFA3	CCAGGCTCAAGGAAAAACATG	CTGGTAGATGCAGGTTCCATAGC
TLR4	GAAGAGTGAGTGGTGCAAGTATGAA	ATGGCAGCATCATTGTTCTCATC
IFNG	GGAGACCATCAAGGAAGACATGA	GCTTTGCGTTGGACATTCAA
IRF5	CCCCCAGAGCTGGTTGTTAA	CTGGAGTGTGCAGAGATGACACA
IL10	GCCATGAGTGAGTTTGACATCTTC	GATTTTGGAGACCTCTAATTTATGTCCTA
CTLA4	CACTGAGGTCCGGGTGACA	GTAGGTTGCCGCACAGACTTC
PDL1	TCCAAGAGAGAGGAGAAGCTTTTC	GCTGTATGGTTTTCCTCAGGATCT
ARG1	AGACACCAGAAGAAGTAACTCGAACA	TCCCGAGCAAGTCCGAAAC
TGFB1	CTGCTGAGGCTCAAGTTAAAAGTG	TGAGGTATCGCCAGGAATTGT
HBB	GCCCATCACTTTGGCAAAGA	CCAGCCACCACTTTCTGATAGG
CD4	AAATGCCACACGGCTCTCA	GGGTGCTGTGCTTCTGTGAAC
CD8	CCGAGAGAACGAGGGCTACTATT	GCACGAAGTGGCTGAAGTACAT
CD34	CAGGGAAAGGCCAGTGTGAA	ACCACGTGTTGTCTTGCTGAAT

CD45	AAGCTCCCTGAAGCAAAGGAA	GCAGGACCATTGACAGAATGTTC
ITGA2B	TGCTGCTGCTCACCATCCT	CCGGTTCCGCTTGAAGAAG
IL6	TCATCACTGGTCTTTTGGAGTTTG	TCTGCACAGCTCTGGCTTGT
IL8	TGCTAAAGAACTTAGATGTCAGTGCAT	TGGTCCACTCTCAATCACTCTCA
CCL20	GATACACAGACCGTATTCTTCATCCTAA	TGAAAGATGATAGCATTGATGTCACA
CXCL14	AAGCTGGAAATGAAGCCAAAGT	ACACGCTCTTGGTGGTGATG
CCR9	GGATTCCGCTTATTCCTTGGT	TGCGAACCCAGCTGTTATAATCT
CD39	CCCAGCTGAGCAACCATTGT	GACCAGGGAGAATAGAACCATGA
MRC1	AAAGCTGACACAAGGAAGATGGA	TCAGGAGGATCACAATGATGACTAC
CEBPA	TTGTACTGTATGCCTTCAGCATTG	TCGGCTGATAAAGCAAAATATTTG
NFKB1	GGATCACAGCTGCTTTCTGTTG	CGACCGTGATACCTTTAATGACAA
HIF1A	TTGCCAGCTCAAAAGAAAACAA	ACCAACAGGGTAGGCAGAACA
R2RX7	CTGTGAGGAAGCCCAAGCA	CAGAATCACCTGAAGGCTTCTTCT
RORC	CGGAAGGCAAGATCAGATCCT	CCCTGGTGTCCTCCATGCT
S100A8	GGCCAAGCCTAACCGCTATAA	CTTCTGAAAGACAGCTGACAAGAGA
S100A9	CTGAGCTTCGAGGAGTTCATCA	CGTCACCCTCGTGCATCTT
SOCS3	GCTAAGAGATTCGCCTTAAATGCT	CTTGGTGCCCTCCAGTGAGT
Bovine		
HBB	GGCATGAAGCATCTCGATGA	CAGCTTATCACAGTGCAGCTCACT
GAPDH	AGGTTGTCTCCTGCGACTTCA	GTGGTCGTTGAGGGCAATG
Rat		
actb	TCTGTGTGGATTGGTGGCTCTA	CTGCTTGCTGATCCACATCTG
gapdh	ACCAGGTTGTCTCCTGTGACTTC	CAGGAAATGAGCTTCACAAAGTTG

Supplementary Table 2.

Characteristics of IBD patients from who samples were obtained

Factor	N=63
Mean age (years)	48
Gender (% male)	60
Ulcerative colitis (%)	62
Crohn's disease (%)	38
Disease duration (years)	12
Mean CRP	8.3
Mean HBI / SCCAI score	3
Mean Mayo endoscopy score	1