## Supplementary materials



**Figure S1.** Cytokine release and correlations in IEC/PBMC co-culture. IEC were basolaterally exposed to  $\alpha$ CD3/CD28-activated PBMC and apically to 0.25-1% NDO (2'-FL or GF) in combination with CpG (Figure 1A). After 24 hours incubation, IL-5 (**A**), IL-17A (**B**) and TNF $\alpha$  (**C**) concentrations were measured in the basolateral supernatant. Additionally, the correlations between galectin-9 and IFN $\gamma$  (**D**), IL-13 (**E**) or IL-10 (**F**) concentrations were studied in the IEC/PBMC co-culture. Data are represented as mean ± SEM of six independent PBMC donors (\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001).



**Figure S2.** Correlations between IEC-derived mediator release. IEC were washed after IEC/PBMC co-culture. IECderived mediator release was studied by measuring galectin-3, -4, -9 and TGF- $\beta$ 1 concentrations in the basolateral supernatant (Figure 1B). Correlations between galectin-9 (**A**) and TGF- $\beta$ 1 (**B**) with galetin-3 and -4 are shown. Correlation was tested using Spearman's correlation coefficient (\*\* *p* < 0.01, \*\*\* *p* < 0.001).



**Figure S3.** Correlations of IEC-derived mediator and cytokine release in the IEC/PBMC co-culture. IEC-derived mediator release galectin-3 (**A**), galectin-4 (**B**), galectin-9 (**C**) and TGF- $\beta$ 1 (**D**) were correlated to the concentrations of cytokines in IEC/PBMC (IFN $\gamma$ , IL-13 and IL-10). Correlations were tested using Spearman's correlation coefficient (\* p < 0.05, \*\*\* p < 0.001).



**Figure S4.** Cytokine concentrations in IEC/moDC co-culture. Conditioned IEC were co-cultured with immature moDC for 48 hours (Figure 1C). After incubation, concentrations of galectin-3 (**A**), galectin-4 (**B**), galectin-9 (**C**) and TGF- $\beta$ 1 (**D**) were measured in the basolateral supernatant. Results are represented as mean ± SEM from six independent PBMC donors (# *p* < 0.01, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001).