IL-27 as an Anti-inflammatory Cytokine in the Intestine

IL-27 promotes intestinal epithelial barrier integrity.

Administration of IL-27 ameliorates colitis in mice.

IL-27R knockout promotes inflammatory Th17 responses in the colon, worsens DSS colitis.

IL-27R–/– in IL-10–/– mice improves survival.

IL-27 suppresses neutrophil function.

IL-27 promotes oral tolerance.

Intestinal epithelium

IL-27 promotes the immunosuppressive activity of Tregs and is required for the induction of Tregs by B cell-derived IL-10.

IL-27 neutralization precipitates more severe infectious colitis.

IL-27 promotes the intestinal epithelial barrier integrity.

IL-27 neutralization precipitates more severe infectious colitis.

IL-27 as a Proinflammatory Cytokine in the Intestine

Concurrent IL-27R–/– in IL-10–/– mice improves survival.

IL-27R–/– prevents the induction of T cell transfer enterocolitis, lessens DSS colitis.

IL-27R–/– decreased IL-6 and IL-1β, thereby preventing Th17 cell development.