

DSS-induced intestinal inflammation mouse model (IBD- inflammatory bowel disease)

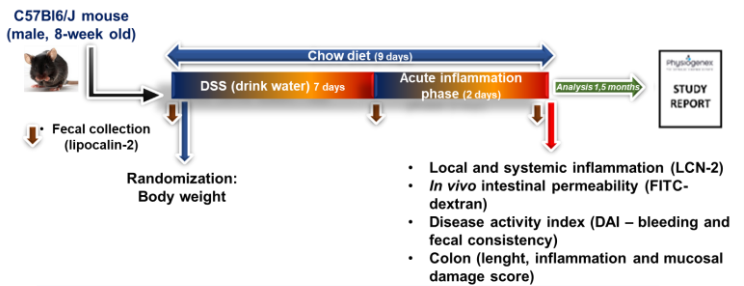
✓ Test your drug or pre/probiotics in a fast and cost-effective intestinal inflammation model

Key benefits

Get benefits from our dextran sodium sulfate (DSS) induced colitis mouse, a simple and rapid model of intestinal barrier disruption and inflammation for preclinical evaluation of drugs and pre or probiotics candidates.

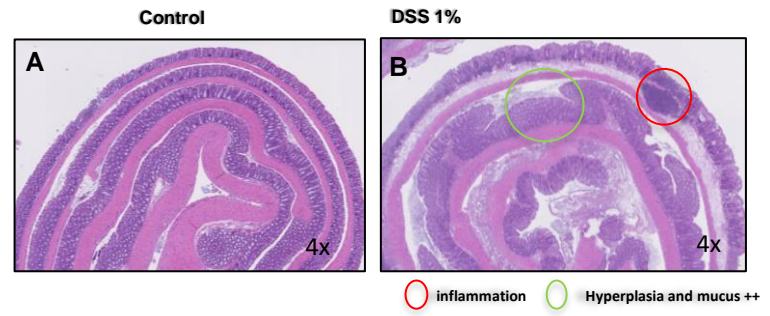
ANIMAL MODEL

- **Background strain/gender:** C57BL/6J mice, male
- **Dextran Sodium Sulfate (DSS)- induced colitis:** 7 days of DSS in water (*ad libitum*)
- **Experimental design:**



DSS INDUCES INFLAMMATION, EPITHELIAL AND MUCOSAL DAMAGES

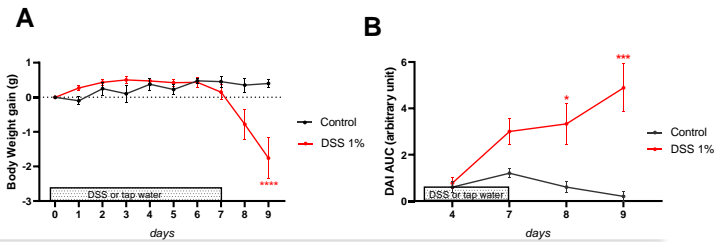
H&E staining



H&E staining of colon swiss roll control group (A) and DSS 1% (B)

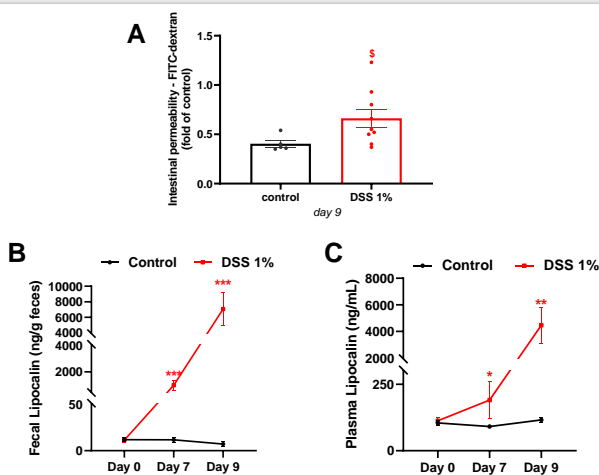
DSS-induced colitis

DSS REDUCES BODY WEIGHT AND INCREASES DISEASE ACTIVITY INDEX



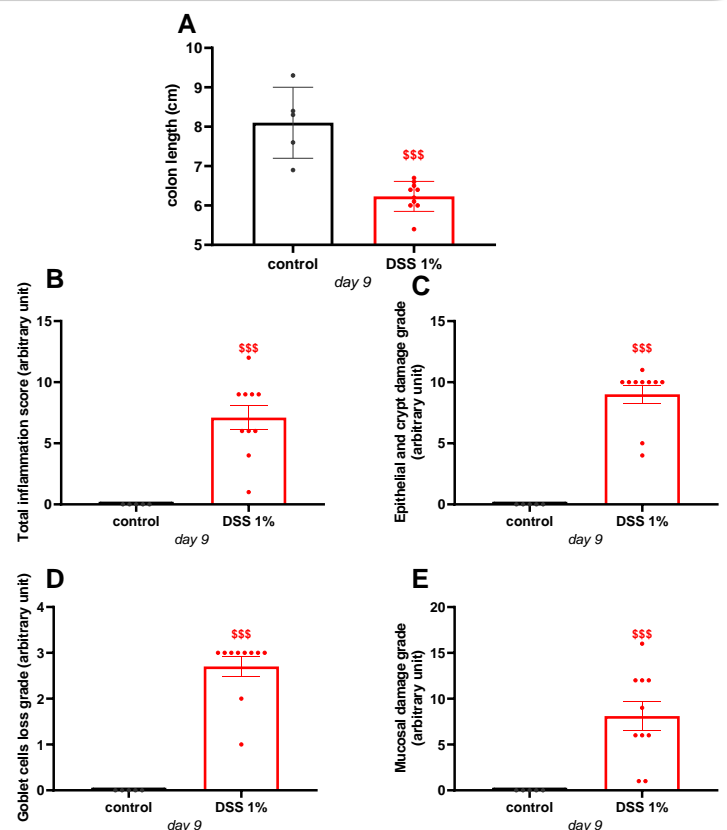
(A) Body weight loss and (B) Disease Activity Index (DAI) * $p < 0.05$, *** $p < 0.001$, **** $p < 0.0001$ vs. control group

DSS DISTURBS THE INTESTINAL PERMEABILITY AND INDUCES LOCAL AND SYSTEMIC INFLAMMATION



(A) Intestinal Permeability – FITC- dextran, (B) Fecal and (C) Plasma lipocalin-2 – inflammation marker. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ vs. control group

DSS DECREASES COLON LENGTH AND INCREASES INFLAMMATION, EPITHELIAL AND MUCOSAL DAMAGES.



(A) Colon length, (B) total inflammation score, (C) epithelial and crypt damage grade, (D) goblet cells, (E) mucosal damage grade *** $p < 0.001$ vs. control group