

DSS-induced Inflammatory Bowel Disease

The DSS model is a chemically-induced model of Inflammatory Bowel Disease (IBD) using dextran sodium sulphate (DSS) in the drinking water to induce ulcerative colitis-like inflammation. Acute colitis is induced by continuous administration of DSS over the course of 5 days. Chronic colitis is induced by administering DSS in sterile drinking water in alternating cycles. Disease is descending colon specific and characterized by gross bleeding, thickened colon walls with occasional adhesions, pseudo polyps, redness and edema as well as reduced overall colon length.

Pathology of the DSS IBD model involves general innate inflammation and is therefore a more useful model to study the role of innate leukocyte cells such as macrophages and neutrophils in induction of disease. A one-time i.p. injection of anti-p40 anitbody significantly reduces disease severity.

Experimental Overview

Animal Strain:	C57BL/6 mice
Study Duration:	10 days
Control:	Anti-P40
Standard Assessments:	Colitis Clinical Score Colon Gross Pathology Body Weight Colon Length/Weight
Additional Assessments:	Biomarker Analysis Colon Explant Histology



Clinical Colitis Score in DSS treated mice. * represents P<0.05 in comparision to vehicle



Vehicle

AntiP-40



Body Weight of DSS treated mice. * represents P<0.05 in comparision to vehicle

Our Clients Say ...

"The performance of your team far exceeded our expectations. The study was performed well and we appreciate all your input into the study design. Your responsiveness and feedback during the study and following in the data interpretation was extremely helpful to guide our next steps. That's something we don't find with every CRO."

S.G., Toxicologist, Biotech Company

"Of all the CROs that I have used over the years... MLM Medical Labs been one of the very best in terms of scientific knowledge, data quality, timelines, flexibility and personal contacts."

O.B., Director of Therapeutics, Pharmaceutical Company

"Throughout our relationship, you have been attentive to our needs and have completed exploratory pilot studies and three drug studies with professionalism and an understanding of tight biotech timelines that are unmatched by other CROs."

D.Z., Director of Therapeutics, Biotech Company

About MLM Medical Labs

MLM Medical Labs is a leading specialty and central laboratory with comprehensive research services and diagnostic capabilities in Europe and the United States. Offering a range of standard and fully customizable analytical services across a variety of therapeutic areas, we add value at every stage of the drug development process from nonclinical/preclinical through phase IV clinical trials that serve to augment and accelerate research programs to their next stages and milestones. Each disease area is supplemented extensively by different models and batteries of in vitro and ex vivo analyses, offering answers to your therapeutics' effect on different parameters. With our strong reputation for scientific expertise, passionate approach to customer care, and adherence to ouality data, we empower clients ranging from emerging biotech to Top Ten Global Pharma companies to reach confident clinical decisions that ultimately serve to improve patient lives.

If you'd like to discuss a particular study or speak with a scientist, please reach out to us!

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