



keyword



Colorectal cancer

Short-term chemical carcinogenesis model

Azoxymethane / Dextran Sodium Sulfate

Short-term colon carcinogenesis model

We will introduce a colon carcinogenesis model induced by azoxymethane (AOM), carcinogen, and dextran sodium sulfate (DSS), a colon inflammation inducer.

Please feel free to contact us if you have any questions or concerns about the details.

Schedule and Methods

Animals used

ICR and C57BL/6J Mice

Inducing substances

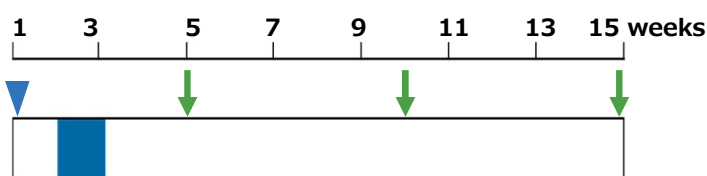
<Initiator>

Azoxymethane (AOM)

<Promoter>

Dextran Sodium Sulfate (DSS)

Test Schedule



▼ : Azoxymethane (AOM), ip

■ : DDS administration in drinking water

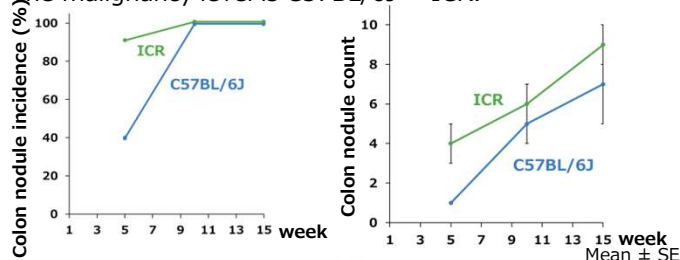
↓ : Necropsy

Evaluation items

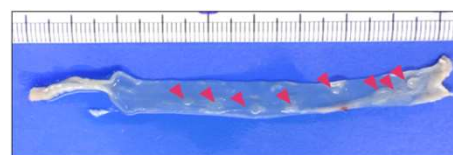
- Necropsy (5, 10, and 15 weeks after AOM administration)
- Colon nodule counting
- Histopathological examination

Results

- ICR mice showed adenoma formation from 10 weeks after AOM administration.
- C57BL/6J mice showed adenoma formation from 5 weeks after AOM administration and adenocarcinoma 10 weeks after AOM administration.
- The malignancy level is C57BL/6J > ICR.



Incidence and number of colonic nodules after AOM administration



ICR



C57BL/6J

▼ : Colon nodules

15 weeks after AOM administration

Advantages of the model

- ✓ Colon cancer formation in a short period of time
- ✓ Carcinogenicity can be evaluated

We can evaluate the carcinogenic promoting effect of drugs and pharmacological effect of anticancer drugs with this model.