Model Name
Inflammation, Carrageenan-Induced, Mouse

Item Number
553510

Introduction
Carrageenan-induced paw edema is a widely used method for assessing the acute inflammatory responses and novel anti-inflammatory drugs.

Procedure Summary
Groups of 6 ICR derived male mice weighing 26 ± 2 g are used and fasted overnight before conducting the study. The test substances, vehicle, and the reference compound, aspirin at 150 mg/kg are administered by oral gavage (PO) one hour before the right hind paw received intraplantar (ipl) injection of γ-carrageenan (0.05 mL of 1 % suspension). Both hind paws are measured and recorded 4 hours after γ-carrageenan challenge. The swelling of right hind paw as an indicator of inflammation compared with paw volume of left hind paw as baseline result in the paw edema. ANOVA followed by Dunnett's test is applied for comparison between vehicle and treatment groups. P<0.05 is considered significant.

Suggested Testing
• n=6/group (study design dependent)
• Doses may be administered PO, IV, IP, and SC
• Assessments available: Body weight, Paw Volume, Biomarkers and Histology

Turnaround Time(s)
• Acute Assay: In-Life completion in 2-4 weeks from sample receipt
• For Subacute Assays: 6 weeks to 3 months

Literature

Related Assay(s) (Item # - Assay Name - Species)
553520 – Inflammation, Carrageenan-Induced, Rat
553010 – Arthritis, Adjuvant-Induced (AIA) - Rat
553600 – Arthritis, Collagen mAB-Induced (CAIA) - Mouse
553700 – Arthritis, Collagen-Induced (CIA) - Rat

Modified Protocols
We will readily accommodate client-specified alterations.

Laboratory
These assays are performed at our AAALAC accredited laboratory in Taipei.

Animal Welfare
All aspects of this work are performed in general accordance with the Guide for the Care and Use of laboratory animals (National Academy Press, Washington, DC, 2011). The study protocol was approved by the Pharmacology Discovery Services IACUC and is performed with the oversight of veterinarians to assure the humane treatment of laboratory animals.

For current details about our Company address and contact information, please reference our website http://www.pharmacologydiscoveryservices.com/company-info/
Reference Compound(s)
* Aspirin, Ibuprofen, Indomethacin

Graph

*P<0.05, treated vs. vehicle control; one-way ANOVA followed by Dunnett's test.

Last modified October 1, 2018