**Model Name**
Hepatic Injury, Concanavalin A-Induced

**Item Number**
546030

**Introduction**
Concanavalin A (Con A)-induced liver injury is a mouse model of immune-mediated liver injury that resembles viral and autoimmune hepatitis in humans. The aim of this study model is to investigate the effects of test substances on liver injury induced by Con A.

**Procedure Summary**
Group of 6 male BALB/c mice weighing 24 ± 2 g is fasted overnight prior to use. Test substance is administered by oral gavage at 0.5 hour before Concanavalin A (Con A, 15 mg/kg, i.v.) as well as 4 and 8 hours later. The animals are sacrificed 24 hours after administration of Con A when serum alanine aminotransferase (ALT) and aspartate aminotransferase (AST) levels are assessed spectrophotometrically (optimized UV method). 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, ALT, AST, ALP, T-BIL and ALB levels, Liver weight, Biomarker analysis (protein or mRNA) and Histopathology

**Turnaround Time(s)**
- For Acute Assays: 4 weeks from sample receipt
- For Subacute Assays: 6 weeks to 3 months

**Literature**

**Related Assay(s) ** (Item # - Assay Name - Species)
546040 - Hepatic Injury, Acetaminophen (APAP)-Induced - Mouse

**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.

**Reference Compound(s)**
* Cyclosporin A, Dexamethasone, Silymarin

Last modified October 1, 2018

For current details about our Company address and contact information, please reference our website [http://www.pharmacologydiscoveryservices.com/company-info/](http://www.pharmacologydiscoveryservices.com/company-info/)