Model Name
Hematology, Blood Cell Examination (HCT, HGB, PLT, RBC, WBC)

Item Number
547510

Introduction
The Sysmex XT-2000iV is a hematology analyzer that combines laser and impedance technology. The objective of this study is to evaluate the analytical performance of the Sysmex XT-2000iV for cell counts in animals.

Procedure Summary
Test substance is administered orally (PO) to a group of 6 ICR derived male or female mice weighing 22 ± 2 g. For each animal, blood hematocrit (HCT), hemoglobin (HGB), platelet (PLT), red blood cell (RBC) and white blood cell (WBC) counts are determined after 96 hours by means of an automatic hematology analyzer XT-2000iV (Sysmex, Japan). The mean ± SEM blood cell counts for each group is calculated and unpaired Student’s t test is applied for comparison between treated and/or vehicle groups. Differences are considered significant at P < 0.05.

Suggested Testing
• n=6/group (study design dependent)
• Doses may be administered PO, IV, IP and SC

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

Literature
Henry JB. Clinical Diagnosis and Management by Laboratory Methods. 16:858, 1979

Related Assay(s)  (Item # - Assay Name - Species)
N/A

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 is 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)
* Cyclophosphamide

Last modified November 20, 2017