**Model Name**
Cardiovascular, Blood Pressure & Heart Rate (NTR, 0.5, 1, 2 hrs)

**Item Number**
515310

**Introduction**
Adverse drug reactions (ADRs) are one of the leading causes of morbidity and mortality in health care. The assay described below is designed to detect possible adverse effects of potential therapeutic agents upon resting arterial blood pressure and heart rate in the unanesthetized normotensive rat (NTR).

**Procedure Summary**
Test substance is administered orally to a group of 5 normotensive Wistar male rats weighing 250 ± 20 g. Systolic blood pressure and heart rate are recorded indirectly through a tail cuff in a temperature-controlled environment (32 ± 1°C) before (0 time) and 0.5, 1 and 2 hours after test substance administration. Blood pressure and heart rate at 0 time are recorded as the 100% control values. Change ≥10% in systolic blood pressure or ≥20% in heart rate at each time interval is considered significant.

**Suggested Testing**
- n=5/group (study design dependent)
- Adverse effects assessed at an initial dose of 30 mg/kg
- Dosing volume at 10 mL/kg

**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)**
534550 - Gastric Emptying, Test Meal - Rat
331850* - Muscarinic M1, GTPyS Binding - Human
252610* - Muscarinic M1 - Human
*provided by partner lab Eurofins Pharma Discovery Services

**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)**
Atropine, *Clonidine, Diazepam, Prazosin

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