Model Name
Pseudomonas aeruginosa (ATCC 15692), Ocular Infection Model, CFU/g

Item Number
608690

Introduction
This assay assesses the antimicrobial efficacy of test articles in an ocular infection model. The microbial counts in tissue are measured. P. aeruginosa strain ATCC 15692 (also known as PAO1) is virulent in the mouse ocular infection model.

Procedure Summary
Groups of 5 immune competent mice are used. Animals are anesthetized and the left cornea is scarified under a dissecting microscope. The wounded cornea is inoculated with 5 µL of pathogen suspension in PBS. Test article and vehicle are then administered by applying 5 µL drops to the infected eye. The animals are humanely euthanized at 26 hr after infection and the individual eyes are surgically harvested, weighed and resuspended in PBS. Tissue homogenates are diluted and plated to agar medium for colony counts. Pathogen counts from treatment groups are compared to vehicle groups and the significance of an effect is determined.

Turnaround Time(s)
5 weeks from sample receipt

Literature

Optional Services
Analysis of cytokines can be performed upon request.

Related Assay(s)  (Item # - Assay Name - Species)
614060* - Pseudomonas aeruginosa (PAO1, ATCC 15692) MIC - Bacteria
*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 BSL2 laboratory in Taipei, Taiwan.

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)
Ciprofloxacin

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

#608690, P. aeruginosa, Ocular Infection Model, Mouse Ciprofloxacin Treatment

Last modified November 20, 2017