Model Name
Candida albicans (ATCC 44858), Systemic (IV) Infection, LD90-100

Item Number
609020

Introduction
This model assesses the efficacy of test articles at protecting against a lethal disseminated infection model of candidiasis. The procedure may be used to evaluate small molecules, vaccines and biologics. Candida albicans is a fungus that grows as yeast and as filamentous cells and causes opportunistic oral, genital, and systemic infections of humans. Strain ATCC 44858 is reported in the literature for infection models with rodents. It is susceptible to azoles, amphotericin B and echinocandins.

Procedure Summary
Groups of 10 immune competent mice are used. Each animal is inoculated with an intravenous administered lethal (LD90-100) dose of pathogen. Test substance and vehicle are administered at specified time points following infection. (Doses may be administered IV, SC, PO, IM, IP or by IV infusion.) Mortality is recorded daily during the following 10 days. Prevention of mortality in 50 percent or more (>50%) of the animals indicates significant activity. The Minimum Effective Dose (MED) is defined as the dose that results in survival of 50% (or more) of the test animals.

Turnaround Time(s)
7 weeks from sample receipt

Literature

Optional Services
Fungal counts and cytokines in tissue may be analyzed upon request.

Related Assay(s)  (Item # - Assay Name - Species)
640020* -  Candida albicans (ATCC 44858) MIC  - Fungi
*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)
Amphotericin B
Graph(s)

Last modified November 20, 2017

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http://www.pharmacologydiscoveryservices.com/company-info/