Model Name
Candida albicans (ATCC 44858), Vulvovaginal Candidiasis, Rat

Item Number
609050

Introduction
This assay evaluates the antimicrobial efficacy of test articles in a rat vaginal infection model. The microbial counts in vaginal lavage fluid are measured. 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 5 oophorohysterectomized rats are used. Estrogen supplementation is supplied with 17β-estradiol administration. Animals are rendered immunosuppressed with dexamethasone treatment prior to infection. Animals are inoculated with pathogen suspension followed by test articles or vehicle administration at 48 hours after inoculation. (Doses may be administered IV, SC, PO, IM, IP or intravaginally.) At time points, animals are humanely euthanized, vaginal lavage is performed and the pathogen burden in lavage fluid is measured. Pathogen counts from treatment groups are compared to vehicle groups and the significance of an effect is determined.

Turnaround Time(s)
6 weeks from sample receipt

Literature

Optional Services
Analysis of cytokines (with Luminex) and PK exposure can be performed upon request. Histopathology of tissue samples may also be performed.

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)
Miconazole

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

**Graph Description:**

- **Log (CFU/Rat)**

**Days after infection:**

- Vehicle, QD X 3 days - 5 D
- Vehicle, QD X 3 days - 7 D
- Nycinid BID X 3 days - 5 D
- Nycinid BID X 3 days - 7 D
- Miconazole BID X 3 days - 5 D
- Miconazole BID X 3 days - 7 D

**Last modified November 20, 2017**