Coccidioides posadasii, Strain CPA0066
Catalog No. NR-50074

For research use only. Not for human use.

Contributor and Manufacturer:
Bridget M. Barker, Research Scientist, Center for Microbial Genetics and Genomics, Northern Arizona University, Flagstaff, Arizona, USA

Product Description:
Classification: Mitosporic Onygenales, Coccidioides
Species: Coccidioides posadasii
Strain/Isolate: CPA0066
Original Source: Coccidioides posadasii (C. posadasii), strain CPA0066 is an environmental isolate collected in 2004 from soil in Tucson, Arizona, USA.1,2
Comment: C. posadasii, strain CPA0066 was deposited as part of a Coccidioides Sequencing Project at the Broad Institute. The complete genome for C. posadasii, strain CPA0066 has been sequenced (GenBank: ABIW00000000).

C. posadasii and C. immitis are dimorphic fungal pathogens and causative agents of coccidioidomycosis, also known as San Joaquin Valley fever, in both immunocompetent and immunocompromised humans, as well as in mammals, primarily in arid regions of North and South America.3 Transmission occurs through inhalation of the infectious airborne arthroconidia from soil, which undergo an asexual life cycle and enlarge to form parasitic spherules that eventually rupture to release endospores, leading to a potentially fatal, disseminated disease.3-5 While transmission between hosts has not been established, infection through transplanted tissues has occurred.6

The original classification as a single species with two distinct geographic populations, California and non-California C. immitis, has evolved, with the non-California isolates established as a new species, C. posadasii, in 2002.4,7,8 Genotypic analysis indicates multiple distinct subpopulations of each genus with limited gene flow: C. immitis is divided into two subpopulations, Central and Southern California, and C. posadasii into three subpopulations, Arizona, Mexico and Texas/South America.4 The current geographic distribution of C. immitis isolates includes Central and Southern California, Arizona, Utah, Washington, Colombia and the Baja California region of Mexico, while C. posadasii has been isolated from Arizona, Texas, Utah, Mexico and Central and South America.3,4,6,9 Analysis of hybrid genotypes suggests the two species may co-exist in nature and undergo sexual reproduction, with predominant gene flow from C. posadasii to C. immitis.2,4,10

Material Provided:
Each vial of NR-50074 contains approximately 0.7 mL of fungal culture in 20% glycerol.

Packaging/Storage:
NR-50074 was packaged aseptically in cryovials and is provided frozen on dry ice. The product should be stored at -70°C or colder.

Growth Conditions:
Media:
Emmons’ Modified Sabouraud Dextrose broth or Yeast Mold (YM) broth or equivalent
Emmons’ Modified Sabouraud Dextrose agar or equivalent
Incubation:
Temperature: 37°C
Atmosphere: Aerobic with 5% CO2
Propagation:
1. Keep vial frozen until ready for use; thaw rapidly in a water bath at 25°C to 30°C. Typically, this takes less than 5 minutes.
2. Transfer the entire contents of the vial into Emmons’ Modified Sabouraud Dextrose broth.
3. Incubate at 37°C for 6 to 12 days.

Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Coccidioides posadasii, CPA0066, NR-50074.”

Biosafety Level: 3


Disclaimers:
You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for...
Use Restrictions:
This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

ATCC® is a trademark of the American Type Culture Collection.