

***Mucor circinelloides* forma *circinelloides*,  
Strain 1006PhL**

**Catalog No. NR-49108**

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Classification: Mucoraceae, *Mucor*

Species: *Mucor circinelloides* forma *circinelloides*

Strain: 1006PhL

Original Source: *Mucor circinelloides* forma *circinelloides* (*M. circinelloides* f. *circinelloides*), strain 1006PhL, was obtained from human skin during a skin microbiome study in Bethesda, Maryland, in 2012.<sup>1,2</sup>

Comments: *M. circinelloides* f. *circinelloides*, strain 1006PhL is virulent in murine and insect host models (larval *Galleria mellonella*).<sup>2,3</sup> *M. circinelloides* f. *circinelloides*, strain 1006PhL ([HMP ID 1544](#)) is a reference genome for [The Human Microbiome Project](#) (HMP). The complete genome sequence of *M. circinelloides* f. *circinelloides*, strain 1006PhL is available (GenBank: [AOCY01000000](#)).

*M. circinelloides* f. *circinelloides* can be a food-borne pathogen. *M. circinelloides* f. *circinelloides* is the most virulent subspecies of *M. circinelloides* and is commonly implicated in human disease. Due to the increase in the number of immunosuppressed individuals the mortality rate from gastrointestinal mucormycosis has risen as high as 85%.<sup>2</sup> Fungal food-borne pathogens, like *M. circinelloides*, are becoming a serious public health concern, causing severe and often fatal infections in immunocompromised hosts.<sup>1</sup>

**Material Provided:**

Each vial of NR-49108 contains approximately 0.5 mL of *M. circinelloides* f. *circinelloides* spores and mycelia in Yeast Mold broth with 20% glycerol.

**Packaging/Storage:**

NR-49108 was packaged aseptically in cryovials and is provided frozen on dry ice. The product should be stored at -60°C or colder. For long term storage, cryogenic temperature (-130°C or colder), preferably in the vapor phase of a liquid nitrogen freezer, is recommended.

**Growth Conditions:**

Media:

Yeast Mold broth or Nutrient broth or equivalent  
Yeast Mold agar or Potato dextrose agar or Nutrient agar or equivalent

Incubation:

Temperature: 25°C to 30°C

Atmosphere: Aerobic

Propagation:

1. Keep vial frozen until ready for use; thaw rapidly in a water bath at 25°C to 30°C.
2. Immediately after thawing, inoculate an agar plate with approximately 40 µL of thawed culture or transfer the entire thawed aliquot into a single tube of broth.
3. Incubate the plate or tube at 25°C for 2 to 7 days.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Mucor circinelloides* forma *circinelloides*, Strain 1006PhL, NR-49108."

**Biosafety Level: 1**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories](#), 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. Segre, J., Personal Communication.
2. Findley, K., et al. "Human Skin Fungal Diversity". *Nature* 498 (2013): 367-370. Pubmed: 23698366.
3. Lee, S. C., et al. "Analysis of a Food-Borne Fungal Pathogen Outbreak: Virulence and Genome of a *Mucor circinelloides* Isolate from Yogurt." *Mbio* 5 (2014): 01390-14. Pubmed: 25006230.

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