

Cryptococcus neoformans*, Isolate 4*Catalog No. NR-41294****For research use only. Not for human use.****Contributor:**

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Manufacturer:

BEI Resources

Product Description:

Classification: *Filobasidiaceae*, *Cryptococcus*

Species: *Cryptococcus neoformans*

Isolate: 4

Original Source: *Cryptococcus neoformans* (*C. neoformans*), isolate 4, was obtained from human cerebrospinal fluid in China in June 2011.¹

The *Cryptococcus* species complex is currently composed of two species, *C. neoformans* and *C. gattii*. These species are best recognized as the agents of cryptococcosis, an AIDS-defining illness.^{2,3} *C. neoformans* is divided into two varieties, *C. neoformans* var. *grubii* (serotype A) and *C. neoformans* var. *neoformans* (serotype D).² In the current classification scheme, there are five distinct lineages, referred to as VNI, VNII, VNB, VNIII and VNIV.^{2,3} The two varieties (*neoformans* and *grubii*) are able to recombine and produce diploid or aneuploid intervarietal AD hybrids.² *C. neoformans* has been widely associated with avian excreta.²

Material Provided:

Each vial of NR-41294 contains approximately 0.4 mL of yeast culture in 20% glycerol.

Packaging/Storage:

NR-41294 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 equivalent

Yeast Mold 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 waterbath at 25°C to 30°C. Typically, this takes less than 5 minutes.

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 to 30°C for 2 to 4 days.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Cryptococcus neoformans*, Isolate 4, NR-41294."

Biosafety Level: 2

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.

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References:

1. Zhang, Q. Q., Personal Communication.
2. Cogliati, M. "Global Molecular Epidemiology of *Cryptococcus neoformans* and *Cryptococcus gattii*: An Atlas of the Molecular Types." *Scientifica (Cairo)* 2013 (2013): 675213. PubMed: 24278784.
3. Zhu, P., et al. "Congenic Strains for Genetic Analysis of Virulence Traits in *Cryptococcus gattii*." *Infect. Immun.* 81 (2013): 2616-2625. PubMed: 23670558.

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