**Cryptococcus neoformans**, Strain NIH398

**Catalog No. NR-50333**

For research use only. Not for human use.

**Contributor:**
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**Manufacturer:**
BEI Resources

**Product Description:**
- **Classification:** Filobasidiales, Cryptococcus
- **Species:** Cryptococcus neoformans
- **Strain:** NIH398 (Note: The label incorrectly refers to NR-50333 as strain NIH-398 14508722. The correct strain name for NR-50333 is NIH398.)
- **Serotype:** A (var. grubii)
- **Original Source:** Cryptococcus neoformans (C. neoformans), strain NIH398 was isolated in Baltimore, Maryland in 1970 from human cerebrospinal fluid.¹ ³
- **Comments:** C. neoformans, strain NIH398 was deposited as susceptible to fluconazole and with a high level of heteroresistance to fluconazole (LHF) developing.²

There are currently two species, C. neoformans and C. gattii, in the Cryptococcus species complex. These species are best recognized as the agents of cryptococcosis, an AIDS-defining illness. C. neoformans has been widely associated with avian excreta.³ C. neoformans is divided into two varieties, C. neoformans var. grubii (serotype A) and C. neoformans var. neoformans (serotype D).⁴ In the current classification scheme, there are five distinct lineages recognized, named VNI, VNII, VNB, VNIII and VNIv.⁴ The two varieties (neoformans and grubii) are able to recombine and produce diploid or aneuploid intervarietal AD hybrids.⁴

**Material Provided:**
Each vial contains approximately 0.5 mL of C. neoformans in 20% glycerol.

**Packaging/Storage:**
NR-50333 was packaged aseptically in cryovials and is provided frozen on dry ice. The product should be stored at cryogenic temperature (≤-130°C or colder), preferably in the vapor phase of a liquid nitrogen freezer. If liquid nitrogen storage facilities are not available, frozen cryovials may be stored at -70°C or colder for approximately one week.

**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 and/or transfer the entire thawed aliquot into a single tube of broth.
  3. Incubate the plate and/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, Strain NIH398, NR-50333."

**Biosafety Level:** 2

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References:

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