Cryptococcus neoformans, Strain NIH9hi90

Catalog No. NR-50335

For research use only. Not for human use.

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Manufacturer:
BEI Resources

Product Description:
Classification: Filobasidiaceae, Cryptococcus
Species: Cryptococcus neoformans
Strain: NIH9hi90
Serotype: A (var. grubii)²
Original Source: Cryptococcus neoformans (C. neoformans), strain NIH9hi90 was derived from strain NIH 9, a clinical isolate which was originally isolated in 1963 in Sassamanville, Pennsylvania, USA.¹ ³
Comments: C. neoformans, strain NIH9hi90 is a laboratory derived strain that has been modified to overexpress heat shock protein 90 (HSP90). C. neoformans, strain NIH9hi90 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.⁴ 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.⁵ 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-50335 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 NIH9hi90, NR-50335.”

Biosafety Level: 2


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References:

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