Certificate of Analysis for NR-48768

Cryptococcus neoformans, Strain KN99a

Catalog No. NR-48768

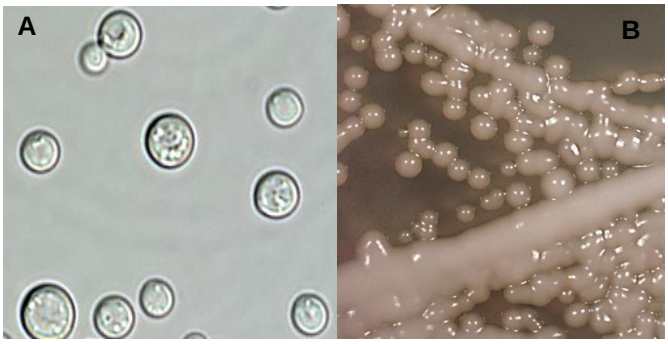
Product Description: *Cryptococcus neoformans (C. neoformans),* strain KN99a was derived from strain H99O, after passage in the rabbit model of central nervous system infection.

Lot[1]: 63383702 **Manufacturing Date: 07APR2015**

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology[2]	Report results	Circular yeast form cells, usually single (Figure 1A)
Colony morphology[2]	Report results	Circular, convex, butyrous, shiny, smooth; entire margin (Figure 1B)
CGB agar characterization[3]		
NR-48768	Yellow (no color change)	Yellow (no color change)
Positive control (*C. neoformans;* ATCC® 32045™)	Yellow (no color change)	Yellow (no color change)
Negative control (*C. gattii*; ATCC® MYA-4563™)	Blue	Blue
Genotypic Analysis		
Sequencing of partial 18S ribosomal RNA (rRNA) gene, internal transcribed spacer (ITS) 1, 5.8S rRNA gene, ITS 2, partial 26S rRNA (~ 900 base pairs)	≥ 99% sequence identity to *C. neoformans,* strain H99 (GenBank: CP003821)	99.9% sequence identity to *C. neoformans,* strain H99 (GenBank: CP003821)
Sequencing of 26S rRNA gene (~ 600 base pairs)	≥ 99% sequence identity to *C. neoformans,* strain H99 (GenBank: CP003821)	99.8% sequence identity to *C. neoformans,* strain H99 (GenBank: CP003821)
Purity[4]		
Nutrient broth with 0.1% Yeast Extract at 25°C	No bacterial growth	No bacterial growth
Nutrient broth with 0.1% Yeast Extract at 37°C	No bacterial growth	No bacterial growth
Viability (post-freeze)[2]	Growth	Growth

[1]NR-48768 was produced by inoculation of the deposited material onto Yeast Mold slants and grown 4 days at 30°C in an aerobic atmosphere. Cells were harvested from the slants with 20% glycerol to produce this lot.
[2]3 days at 25°C in an aerobic atmosphere on Modified Sabouraud Dextrose medium
[3]2 days at 35°C in an aerobic atmosphere. CGB medium differentiates *C. gattii* from *C. neoformans* based on the ability of *C. gatti* isolates to grow in the presence of L-canavanine and to assimilate glycine as a sole carbon source, resulting in a blue color. *C. neoformans* isolates will remain yellow. [McTaggart, L., et al. "Rapid Identification of *Cryptococcus neoformans* var. *grubii*, *C. neoformans* var. *neoformans*, and *C. gattii* by Use of Rapid Biochemical Tests, Differential Media, and DNA Sequencing." J. Clin. Microbiol. 2011 (49): 2522-2527. PubMed: 21593254.]
[4]Clarity of broth was determined by visual inspection after 6 days in an aerobic atmosphere.

Figure 1: Cellular and Colony Morphology



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Certificate of Analysis for NR-48768

Date: 20 JUL 2016 **Signature:** 

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