b|e|i RESOURCES
SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for NR-50421

Cryptococcus gattii, Strain MIC64-C1

Catalog No. NR-50421

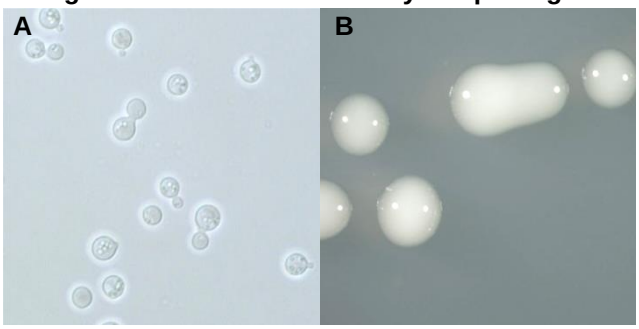
Product Description: *Cryptococcus gattii* (*C. gattii*), strain MIC64-C1 was isolated from human lung biopsy tissue in the Pacific Northwest region of North America. *C. gattii*, strain MIC64-C1 was deposited as lineage VGIIb and resistant to azoles.

Lot[1]: 2188 **Manufacturing Date: 20DEC2016**

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology[2]	Report results	Globose, budding and vacuoles (Figure 1A)
Colony morphology[2]	Report results	Circular, convex, entire, and butyrous (Figure 1B)
Canavanine-glycine-bromothymol blue (CGB) differential medium[3]	Report results	Blue
Genotypic Analysis		
Sequencing of partial 18S rRNA gene, internal transcribed spacer (ITS) 1, 5.8S rRNA gene, ITS 2, partial 28S rRNA (~ 510 base pairs)	≥ 99% sequence identity to *C. gattii* (GenBank: FJ914888.1)	99.6% sequence identity to *C. gattii* (GenBank: FJ914888.1)
Sequencing of 26S rRNA gene (~ 620 base pairs)	≥ 99% sequence identity to *C. gattii* (GenBank: KC171326.1)	100% sequence identity to *C. gattii* (GenBank: KC171326.1)
Antimicrobial Susceptibility[4,5]		
Fluconazole	Report MIC (µg/mL)	> 256 µg/mL
Purity[6]		
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-50421 was produced by inoculation of the deposited material onto Yeast Mold agar and incubated for 6 days at 25°C in an aerobic atmosphere. Cells were harvested from agar with 20% glycerol.
[2]2 days at 25°C in an aerobic atmosphere on Yeast Mold agar
[3]5 days at 26°C in an aerobic atmosphere. CGB medium differentiates *C. gattii* from *C. neoformans* based on the ability of *C. gattii* 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 show yellow to light green on CGB medium [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. 49 (2011): 2522-2527. PubMed: 21593254.].
[4]2 days at 35°C in an aerobic atmosphere on RPMI 1640 agar with MOPS and 2% glucose (Remel™ R04067)
[5]bioMérieux Etest® 510858
[6]Clarity of broth was determined by visual inspection after 8 days in an aerobic atmosphere.

Figure 1: Cellular and Colony Morphologies



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Certificate of Analysis for NR-50421

Date: 09 JUN 2017 **Signature:** 

BEI Resources Authentication

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