Cryptococcus gattii, Strain R265

Catalog No. NR-43208

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Contributor and Manufacturer:
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Product Description:
Classification: Filobasidiaceae, Cryptococcus
Species: Cryptococcus gattii
Strain: R265

Original Source: Cryptococcus gattii (C. gattii), strain R265 was isolated from a human on Vancouver Island, Canada during the outbreak that began in the late 1990's. 

Comment: C. gattii, strain R265, was obtained from the laboratory of J. Heitman at Duke University Medical Center as part of the Broad Fungal Genome Initiative (Broad Institute) and characterized as virulent in mice and the greater wax moth, Galleria mellonella. Strain R265 is a wild type, MAT α, strain and is one of two strains utilized to produce a congenic pair. Intermediate progeny, the final congenic pair, and various mutant strains are available from BEI Resources [Table 1 (below) NR-43210 to NR-43225]. The complete genome sequence of C. gattii, strain R265 is available (GenBank: AAFP00000000).

The Cryptococcus species complex is comprised of four distinct lineages, VGI to VGIV, which are currently classified as two species, C. neoformans and C. gattii. These species are best recognized as the agents of cryptococcosis, an AIDS-defining illness.

C. gattii are characterized serologically as serotypes B and C, and clinical isolates are relatively rare. Although cryptococcosis was historically considered to be a tropical and subtropical illness, in the late 1990’s, cryptococcal disease in healthy people, domestic pets and wildlife caused by C. gattii appeared on Vancouver Island, British Columbia and it subsequently spread to the mainland and into the northwest United States. The origin of this outbreak is unknown, though C. gattii strain R265 is known to be the causative agent.

Table 1: C. gattii Strains

<table>
<thead>
<tr>
<th>Parental Strains</th>
<th>BEI Resources</th>
<th>Progeny</th>
<th>BEI Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>R265</td>
<td>NR-43208</td>
<td>Alg40</td>
<td>NR-43210</td>
</tr>
<tr>
<td>CBS1930</td>
<td>NR-43209</td>
<td>Alg75</td>
<td>NR-43211</td>
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<tr>
<td>Alg40</td>
<td>NR-43210</td>
<td>Alg81</td>
<td>NR-43212</td>
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<tr>
<td>Alg265</td>
<td>NR-43208</td>
<td>Alg75</td>
<td>NR-43211</td>
</tr>
</tbody>
</table>

Material Provided:
Each vial of NR-43208 contains approximately 1 mL of yeast culture in Yeast Extract Peptone Dextrose broth containing 15% glycerol.

Packaging/Storage:
NR-43208 was packaged aseptically in cryovials and is provided frozen on dry ice. The product should be stored at -80°C or colder.

Growth Conditions:
Media:
Yeast Extract Peptone Dextrose broth or equivalent
Yeast Extract Peptone Dextrose agar, Yeast Mold agar or equivalent

Incubation:
Temperature: 30°C
Atmosphere: Aerobic

Propagation:
1. Keep vial frozen until ready for use; thaw rapidly.
2. Incubate an agar plate with approximately 50 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 30°C for 2 to 4 days.
Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Cryptococcus gattii, Strain R265, NR-43208.”

Biosafety Level: 2

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References:
1. Idnurm, A., Personal Communication.

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