

# Product Information Sheet for NR-43216

## *Cryptococcus gattii*, Strain Alg127

Catalog No. NR-43216

For research use only. Not for human use.

### Contributor and Manufacturer:

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### Product Description:

Classification: *Filobasidiaceae*, *Cryptococcus*

Species: *Cryptococcus gattii*

Strain: Alg127

Original Source: *Cryptococcus gattii* (*C. gattii*), strain Alg127 is the progeny of a genotypic cross between *C. gattii* strains R265 and Alg115.<sup>1,2</sup>

Comment: *C. gattii*, strain Alg127 is progeny produced towards the generation of a congenic pair.<sup>1,2</sup> It was deposited as expressing a wild type genotype, mating type a. The parental strains, intermediate progeny, final congenic pair and various mutants are available through BEI Resources [NR-43208 through NR-43225, Table 1 (below)].

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.<sup>2,3</sup>

*C. gattii* are characterized serologically as serotypes B and C, and clinical isolates are relatively rare.<sup>3</sup> 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.<sup>2,4</sup> The origin of this outbreak is unknown, though *C. gattii* strain R265 is known to be the causative agent.<sup>4</sup>

Table 1: *C. gattii* Strains

| Parental Strains | BEI Resources | Progeny | BEI Resources |
|------------------|---------------|---------|---------------|
| R265             | NR-43208      | Alg40   | NR-43210      |
| CBS1930          | NR-43209      |         |               |
| R265             | NR-43208      | Alg75   | NR-43211      |
| Alg40            | NR-43210      |         |               |
| R265             | NR-43208      | Alg81   | NR-43212      |
| Alg75            | NR-43211      |         |               |
| R265             | NR-43208      | Alg99   | NR-43213      |
| Alg81            | NR-43212      |         |               |
| R265             | NR-43208      | Alg114  | NR-43214      |
| Alg99            | NR-43213      |         |               |

| Parental Strains | BEI Resources | Progeny   | BEI Resources |
|------------------|---------------|-----------|---------------|
| R265             | NR-43208      | Alg115    | NR-43215      |
| Alg114           | NR-43214      |           |               |
| R265             | NR-43208      | Alg127    | NR-43216      |
| Alg115           | NR-43215      |           |               |
| R265             | NR-43208      | Alg144    | NR-43217      |
| Alg127           | NR-43216      |           |               |
| R265             | NR-43208      | Alg159    | NR-43218      |
| Alg144           | NR-43217      |           |               |
| R265             | NR-43208      | Alg166    | NR-43219      |
| Alg159           | NR-43218      |           |               |
| R265             | NR-43208      | AIR265a   | NR-43220      |
| Alg166           | NR-43219      |           |               |
| R265             | NR-43208      | AIR265α   | NR-43221      |
| Alg166           | NR-43219      |           |               |
| R265             | Mutant        | Alg254    | NR-43222      |
| Alg254           | Mutant        | Alg268    | NR-43223      |
| R265             | Mutant        | AlgFUR1-1 | NR-43224      |
| AIR265a          | NR-43220      | Alg520    | NR-43225      |
| AlgFUR1-1        | NR-43224      |           |               |

### Material Provided:

Each vial of NR-43216 contains approximately 1 mL of yeast culture in Yeast Extract Peptone Dextrose broth containing 15% glycerol.

### Packaging/Storage:

NR-43216 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. Inoculate 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 Alg127, NR-43216."

BEI Resources

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### Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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### References:

1. Idnurm, A., Personal Communication.
2. Zhu, P., et al. "Congenic Strains for Genetic Analysis of Virulence Traits in *Cryptococcus gattii*." Infect. Immun. 81 (2013): 2616-2625. PubMed: 23670558.
3. Diaz, M. R. and J. W. Fell. "Use of a Suspension Array for Rapid Identification of the Varieties and Genotypes of *Cryptococcus neoformans* Species Complex." J. Clin. Microbiol. 43 (2005): 3662-3672. PubMed: 16081894.

4. Kidd, S. E., et al. "A Rare Genotype of *Cryptococcus gattii* caused the Cryptococcosis Outbreak on Vancouver Island (British Columbia, Canada)." Proc. Natl. Acad. Sci. USA 101 (2004): 17258-17263. PubMed: 15572442.

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