Product Information Sheet for NR-50201

Cryptococcus gattii, Strain Alg250

Catalog No. NR-50201

For research use only. Not for human use.

Contributor and Manufacturer:

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Product Description:

Classification: *Filobasidiaceae, Cryptococcus*
Species: *Cryptococcus gattii*
Strain: Alg250
Original Source: *Cryptococcus gattii (C. gattii),* strain Alg250 is the progeny of *C. gattii* strains AIR265a and AlgFUR1-1. Strain AIR265a is the progeny of a genotypic cross between *C. gattii* strains R265 and Alg166 and is one strain of a congenic pair (mating type a). Strain AlgFUR1-1 is a spontaneous mutant that is resistant to 5-fluorouracil (mating type α).[1,2]
Comment: *C. gattii,* strain Alg250 was deposited as mating type a with resistance to 5-fluorouracil.[1,2] The parental strains, intermediate progeny, final congenic pair and various mutants are available through BEI Resources [NR-50184 through NR-50201, 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.[2,3]

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

Table 1: *C. gattii* Strains

Parental Strains	BEI Resources	Progeny	BEI Resources
R265	NR-50184	Alg40	NR-50186
CBS1930	NR-50185		
R265	NR-50184	Alg75	NR-50187
Alg40	NR-50186		
R265	NR-50184	Alg81	NR-50188
Alg75	NR-50187		
R265	NR-50184	Alg99	NR-50189
Alg81	NR-50188		
R265	NR-50184	Alg114	NR-50190
Alg99	NR-50189		
R265	NR-50184	Alg115	NR-50191
Alg114	NR-50190		
R265	NR-50184	Alg127	NR-50192
Alg115	NR-50191		
R265	NR-50184	Alg144	NR-50193
Alg127	NR-50192		
R265	NR-50184	Alg159	NR-50194
Alg144	NR-50193		
R265	NR-50184	Alg166	NR-50195
Alg159	NR-50194		
R265	NR-50184	AIR265a	NR-50196
Alg166	NR-50195		
R265	NR-50184	AIR265α	NR-50197
Alg166	NR-50195		
R265	Mutant	Alg254	NR-50198
Alg254	Mutant	Alg268	NR-50199
R265	Mutant	AlgFUR1-1	NR-50200
AIR265a	NR-50196	**Alg250**	**NR-50201**
AlgFUR1-1	NR-50200		

Material Provided:

Each vial of NR-50201 contains approximately 0.5 mL of yeast culture in 20% glycerol.

Packaging/Storage:

NR-50201 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:
Modified Sabouraud Dextrose broth or equivalent
Modified Sabouraud Dextrose agar, Yeast Mold agar or equivalent
Incubation:
Temperature: 25°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 25°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 Alg250, NR-50201."

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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.

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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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