

<u>RLM#</u>	<u>Genotype</u>	<u>FGSC#</u>
89-22	mat Δ A::ADE5; inl	8322
89-23	mat Δ A::ADE5; inl; ad-2	8323
89-24	mat Δ A::ADE5 his-3; inl	8324
89-25	mat Δ A::ADE5 his-3; thi-4 ad-2	8325
89-26	mat Δ A::ADE5 his-3	8326
89-27	mat Δ A::ADE5; Δ am::mat-A	8327
89-28	mat Δ A::ADE5; Δ am::mat-A inl	8328
89-29	mat Δ A::ADE5 his-3; Δ am::mat-A inl	8329

Strains FGSC# 8322-8326 contain no idiomorph, and are therefore completely sterile. They are able to form heterocaryons with other Oak Ridge-compatible strains, and to support them in crosses without participating in the crosses. The original A idiomorph has been replaced by the wild type ADE5 allele of *Schizophyllum commune*. This gene weakly active in *N. crassa* at complementing *Neurospora ad-2* mutants, so that strains 8323 and 8325 are leaky adenine-requirers. The leakiness is extreme at 25C, less so at 34C. The his-3 allele is 1-234-723, which is complementable by truncated his-3 plasmids such as pBM60 and pBM61 (*Fungal Genetics Newsl.* 44:34 (1997); ad-2 is allele Y175M256; inl is allele 37401. Reference to the published portion of this work: Ferreira et al., *Genetics* 148: 1069-1079 (1998).

Strains FGSC#8327-8329 contain an ectopic idiomorph, in which the resident mat-A has been replaced by ADE5, and the resident am gene (on LG VR) has been replaced by mat-A. They are thus phenotypically am, and must be grown with an appropriate amino acid that is a transamination substrate, such as leucine. These strains mate with mat-a strains and produces a small but usable crop of black, viable ascospores. Hence they can be used to produce other marked strains with an ectopic A- idiomorph, or, by assortment, without any idiomorph.

Bob Metzenberg, 8/5/98