Fungal Genetics Stock Center Dept. of Microbiology Univ. of Kansas Medical Center

Kansas City, KS 66103

recipients of the strain.

Accession number

SPECIES Neurospora crassa

MATING TYPE A

7921

GENOTYPE esr-3 aga A (esr = new locus, enhancer of spermidine requirement)

DESIGNATION OF MUTANT ALLELE(S) BMH36 UM906

LINKAGE GROUP(S) Unknown; VII (UM906)

STRAIN DESIGNATION IF WILD TYPE N/A

YOUR STOCK NUMBER FOR THIS CULTURE IC2749-72A include stock no. from other collections

ORIGIN OF STOCK UV mutagenesis of strain IC2552-65A (spe-3[JP120], inl [89601] aga [UM906] A), which is very leaky for the spermidine requirement yielded after selection for Spe, a strain carrying this additional mutation (esr[BMH]). This strain is a product of outcrossing the original multiple mutant, and does not have a spermidine requirement.

for example - obtained from, genetic background, from cross with; or if collected from nature, collection point, substrate and collector.

PUBLISHED REFERENCES Davis, RH, P Lieu, JL Ristow (1994) Neurospora mutants affecting polyamine-dependent processes and basic amino acid transport mutants resistant to the polyamine inhibitor, α -difluoromethylornithine. Genetics 138:649-655. This publication does NOT assign BMH mutants the esr locus name.

IF UNPUBLISHED, please indicate strain of origin, mutagen, worker, genetic background, important characteristics

COMMENTS (special growth requirements, aberrations, heterokaryon compatib special uses of strain, etc.)

Mutants of the BMH series are difficult to test; their action is to enhance the need of Neurospora for spermidine. Both combining them with leaky spe mutations and testing them on polyamine inhibitors (dicyclohexylamine and $\alpha-$ difluoromethylornithine) will demonstrate this. In addition, ascospores and (usually) conidia of BMH mutants germinate and then pause-often for more than one day-before continuing growth. Note: arginine imposes a spermidine requirement on aga-carrying strains.

YOUR NAME Rowland Davis DATE February 2, 1995