Fungal Genetics Reports

Volume 30 Article 4

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Recommended Citation

Ishikawa, T., and D.D. Perkins. (1983) "Additional irreparable temperature-sensitive mutants.," *Fungal Genetics Reports*: Vol. 30, Article 4. https://doi.org/10.4148/1941-4765.1619

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Abstract

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The heat-sensitive mutants tabulated below either are unmapped, or have not been assigned locus numbers because allelism has not been excluded at one of the 23 established un loci. Mutants with allele numbers prefixed 1 (signifying Tokyo) originated from experiments of Inoue and Ishikawa (1970, Japan. J. Genet. 45: 357-369). These were W-induced in wild type 74A except for mutants numbered T51 which came from experiments where X-rays were used. Temperatures used for testing were 35° vs. 25°C. un(PB319) was extracted from FGSC stock 1758 (designated Abbott 12a); FGSC 1758 also contains the temperature-sensitive scot gene. un(P73G14) originated in al-3 $in1^{t}$ (FGSC stock 2309) following enrichment by inositolless death on minimal medium at 34°C (1973 experiment of N.E. Murray). un(OY351) was identified in 1978 by O.C. Yoder in al-2 (FGSC 3448) following filtration enrichment.

TABLE I

Irreparable heat-sensitive mutants not yet assigned locus numbers because allelism with named un loci has not been excluded

Mutant	FGSC stock number	No. in paper of Inoue and Ishikawa 1970	Linkage	Characteristics	M
un(T28M15)	4304	--	I	Dies at 38°C	UV
un(T33M8)	4311	4	--	Separated from *T(IV;V)T33M8*	UV
un(T42M34)	4305		--	Survives at 38°C	UV
un(T42M36)	4312	--	--	Separated from *T(III;IV)T42M36*	UV
un(T42M38)	4306	--	IL, near mt	Dies at 38°C	UV
un(T42M39)	4307	--	--	Some survival at 38°C	UV
un(T42M46)	4308	--	--	Survives at 38°C	UV
un(T42M54)	4309	--	--	Survives at 38°C	UV
un(T42M56)	2352.2353	12	VI, probably allelic un-13		UV
un(T42M62)	4293	--		slow growth from ascospores, 25°C	UV
un(T42M68)	4294	--		slow growth from ascospores, 25°C	UV
un(T42M70)	4295	--	--	Normal growth at 25°C	UV
un(T51M154)	2354, 2355	22	VI, near or at un-13		x-rays
un(T51M166)	4313	--	II	Separated from *T(I;VI)T51M166*	x-rays
un(T52M23)	4296	26	--	Normal growth at 25°C	UV
un(T54M57)	4314	--			UV
un(T54M58)	4297	37		slow growth from ascospores at 25°C- osmotic remediable	UV
un(T54M68)	4315	--	--		UV
un(P73G14)	4310	--	I, near or at un-7	Scorable at 38°C	EMS
un(OY351)	4316	--	--		UV
un(P8319)	3849	--	IV, near un-12:	Scorable at 38°C	--

Stocks of the new mutants have been deposited in FGSC. The strains deposited have been derived from the originals by passage through at least one cross with an OR wild type. Stadler has also recently described new irreparable heat-sensitive mutants (Neurospora Newsl. 28: 18.19, 1981). - - Institute of Applied Microbiology, University of Tokyo, Bunkyo-ku, Tokyo 113, and Department of Biological Sciences, Stanford University, Stanford, California 94305.