

Cross #

Isolation of ~~ars~~ UFC 220 ~~ars~~ gene.

(p 2936)

F6SC#1909

- ① - - ♀ cret.2a(ars-) × UFC 220 A/a ♂
↓
② - - - - - UFC 220 cret.01a × cret 1A ars-
↓
③ - - - - - UFC 220 cret 19a × OR-A
↓
④ - - - - - UFC 220 cret 108 A × ~~ars~~ ars(01) R502a
↓
⑤ - - - - - UFC 220 cret 253 a × OR-A
↓
⑥ - - - - - UFC^{220 cret} 306 A × alcoy a⁺
↓ select strain containing desired electrophoretic variant plus
al-2, cot, and retrospectively found to carry ylo-1
⑦ - - - - - UFC^{cret} 406 a × OR-A
↓ select strain that is ~~ars~~ al-2⁺, cot⁺, ylo-1⁺
⑧ - - - - - UFC^{220 cret} 507 A × OR-a
↓
⑨ - - - - - UFC 220 cret 609 a × thi-3, ars(101), thr 1 R193A.
↓ select crossover between thi-3 and UFC 220
⑩ - - - - - thi-3, UFC 220, cret 782A × thi-3, ars(101) thr-1 R201a
↓ select crossovers between UFC 220 and thr-1
⑪ - - - - - thi-3, UFC 220, thr-1 cret 801a × ars(101) R501A
↓ select crossover between UFC 220 and thr-1
⑫ - - - - - thi-3, UFC 220 cret 951A × ars(101) R502a
↓ select crossovers between thi-3⁺ and UFC 220
UFC 220 cret 1001A

In the cross #9, 100 ars⁺ progeny were examined with respect to electrophoretic mobility of aryl sulfatase. All were of the UFC-220 type, showing that the structural variant is allelic with, or very closely linked to, the ars- trait.