

*X. maculatus*, YSdSr



Male

Strain code: YSdSr

Phenotypes scored: Pigment pattern: spotted side (Sp), striped side (Sr), spotted dorsal (Sd), shoulder spot (ss), dot (D).

Introduction:

This stock of *X. maculatus* arose from a crossover in Jp163A, resulting in spotted dorsal (Sd) becoming linked to striped side (Sr) on the Y-chromosome. Mating the YSdSr males with Jp163B females allows for maintenance and easy detection of crossovers.

Sex determination / sexing:

Sex determination is XX / XY. These fish can be sexed when they are about 8 weeks old. Females can be discarded at this time because they are not required to maintain the stock.

Scoring:

The males are scored after they have attained sexual maturity. Sd may not be expressed until a fish is mature. The fish are also scored at this time for spotted side (Sp), Sd, Sr, shoulder spot (ss) and dot (D). Some males display a red dot in their mid-upper flank, almost like ss, but located in a slightly more posterior position; presence of this spot should be noted.

Maintenance:

This stock is maintained by crossing the males to Jp163B females. Two or three matings are set up for each generation. Offspring of only one or two matings are needed for the next generation as they are out-crossed. Fish are set up in matings as soon as they mature and have been scored. If there is no production in about 3 months, artificial insemination should be performed. Following is a diagrammatic of the mating scheme:

$X^{Sp}X^{Sp}ssD$  x  $X^{Sp}Y^{SdSr}D$  (P1)  
Jp163B female YSdSr male

$X^{Sp}X^{Sp}ssD$  ,  $X^{Sp}Y^{SdSr}D$  (F1)  
Jp163B female YSdSr male.

Stock source:

Prof. Klaus Kallman, the New York Aquarium, 10/21/92.