

## Male Mice Lacking Sry on the Y Chromosome with a Function Autosomal Sry Transgene

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### INNOVATION

UCLA researchers have developed mice in which the Sry gene is deleted from the Y chromosome and inserted onto an autosome as a transgene, effectively transferring testis determination from the Y chromosome to an autosome. When male mice carrying the Sry transgene are mated to wild-type females, they produce four "core" genotypes that can be used as a model to investigate relationships between sex chromosome complement (XX or XY) and gonadal type that influences phenotypic characteristics.

### APPLICATIONS

- ▶ This mouse strain allows investigation of the separate actions, and interactions, of different types of sex-specific forces (hormonal and chromosomal) that cause sex differences.

### ADVANTAGES

- ▶ New candidate pathways
- ▶ Better understanding on the mechanism of action for antidepressants
- ▶ Simple and convenient assay that may be used in high throughput format

### RELATED MATERIALS

- ▶ [Chen X, et al. Sex difference in neural tube defects in p53-null mice is caused by differences in the complement of X not Y genes. Dev Neurobiol. 2008 Feb 1;68\(2\):265-73.](#)
- ▶ [Additional Information on Mouse Strain #010905 from The Jackson Laboratory](#)

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### INVENTORS

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### OTHER INFORMATION

#### KEYWORDS

Research tools; mouse model

#### CATEGORIZED AS

- ▶ [Research Tools](#)
- ▶ [Animal Models](#)

#### RELATED CASES

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