

ABSTRACT

The male sterility mutation (*mste*) in the mouse generates recessive male sterility and loss of a minor histocompatibility antigen, referred to as H(*mste*). The *mste* mutation arose spontaneously in the BALB/cBy standard inbred mouse strain, and the primary cause of the sterility is unknown.

Analysis of DNA from the progeny of an intraspecific backcross has placed the *mste* locus on mouse Chromosome 10, between markers *D10Mit212* and *D10Mit 213*. As a by-product of this analysis, several other microsatellite markers on Chromosome 10 were also resolved to within 1 cM of genetic resolution.

This high-resolution backcross panel and map of the *mste* locus will facilitate the further resolution of this interesting locus, as well as the identification of candidate gene sequences. Ultimately, this resource will allow the molecular identification of the gene or genes affected by the *mste* mutation.

Keywords: Spermatogenesis • Inbred mice • Minor histocompatibility • Skin transplantation • Genetic mapping