# Java Version of Animal Genome Database

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#### Abstract

We have developed a new version of the Animal Genome Database for network users using Java applets. A new version has included linkage homology map, Java version of clickable linkage map, Japanese tutorial with audio clip. Furthermore, we have started the Mouse Genome Informatics mirror site in Japan.

#### Introduction

We have developed an animal genome database and a search system using the World Wide Web since 1994 (http://ws4.niai.affrc.go.jp/)[2,4]. The linkage maps, cytogenetic maps, polymerase chain reaction primers of pig, cattle, mouse and human, and their references have been included in the database. The software tool for gene mapping named gRanch has been also developed[3]. Three new services have been developed in a new version of our system using Java applets.

#### Linkage Homology Map

Linkage homology map between mouse and other three animals has been available (Fig.1). The URL is http://ws4.niai.affrc.go.jp/dbsearch2/java/mhomo/. The chromosome numbers of the animal are illustrated in the upper area. The values of centimorgan of mouse linkage map are illustrated in the left side. The black vertical lines are illustrated linkage homology between mouse and the animal.

### Java Version of Clickable Linkage Map

Java version of clickable linkage map (http://ws4.niai.affrc.go.jp/dbsearch2/java/linkage/) has been developed. Users can select a locus class for illustration of linkage map in this version. When users click a locus symbol, a new browser page of locus manager is displayed.

### Japanese Tutorial with Audio Clip

Japanese tutorial pages(http://ws4.niai.affrc.go.jp/jis/tutorial.html) are available now. When Java enable WWW browser open these pages, Japanese audio clip play automatically. The RealAudio files are also available.

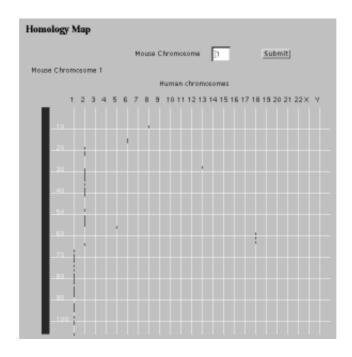


Figure 1: The sample image of linkage homology map

## Mouse Genome Informatics mirror site in Japan

The Jackson Laboratory has developed WWW service of Mouse Genome Informatics including Mouse Genome Database[1]. We have started the mirror site in Japan(http://mgd.niai.affrc.go.jp). The MGD has been dairy updated. MGD users in Asia should connect to the Japan site to access MGD.

### References

- [1] M. Ringwald et.al., "A database for mouse development" Science, Vol. 265, p.2033-2034, 1994.
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- [4] Y. Wada and H. Yasue, "Development of an animal genome database" *CABIOS*, Vol. 12, No. 3, p.231-235, 1996.