

<b>Focus</b>	Development of long-term preservation technology for genetic resources
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<b>Period</b>	FY2007 - 2009
<b>Overview</b>	<p>In order to carry out genome research, it is necessary to generate and analyze hundreds of thousands of DNA materials such as BAC clones and full-length cDNA clones. As a result of genome research on a variety of model organisms, the number of genetic resources maintained in Japan now easily exceeds few millions. Many of these have been collected and maintained via the NBRP, guaranteeing their availability to researchers at home and abroad. The number of genetic resources is still increasing rapidly. However, if all of these resources were to be kept in ultra-low temperature freezers, the conventional method of preservation, the additional space requirements and maintenance costs would expand enormously by the end of NBRP Phase 2.</p> <p>The aim of this project is to develop low-cost, space-saving technology for long-term preservation of large volumes of genetic resources. Following two subjects are carried out: (1) development of technology for long-term preservation of large amounts of DNA at room temperature or in refrigerated conditions; (2) development of technology for long-term preservation of E. coli hosting genetic resources without use of deep freezer. Establishment of these technologies will lead to appreciable reductions in the cost of preserving genetic resources, as well as development of economical backup system for DNA resources. Furthermore, reducing the cost of preserving backup resources should facilitate the establishment of a system to prevent resource losses.</p>
<b>Progress</b>	<p>The 32nd Annual Meeting of the Molecular Biology Society of Japan <a href="#">PDF</a> (0.4MB)</p> <p>The Annual Meeting of Japan Society for Biotechnology, and Agrochemistry 2010 <a href="#">PDF</a> (0.2MB) Japanese only</p>