CDB SEMINAR

Mitsuo Oshimura

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Monday, August 23, 2010

17:00~18:00 C1F CDB Auditorium

Human artificial chromosome meets stem cells

Summary

We have constructed a novel human artificial chromosome(HAC) vector without all endogeneous genes from chromosome #21. The HAC possesses several characteristics that are required for gene therapy vectors and animal models, including stable episomal maintenance and the capacity for large gene inserts in a LoxP site. The HAC can also carry genomic loci with regulatory elements, which allow for the expression of transgenes in a genetic environment similar to the natural chromosome. My talk summaries lessons and prospects learned mainly from our recent studies of HAC-mediated gene expression in embryonic and adult stem cells for gene therapies, and humanized model mice.

Host:

Masayo Takahashi

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