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Minos in mammals

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Transposon-based technology for insertional mutagenesis of the genome has been widely used in *Drosophila* and could be adapted for genomic analysis in mammals. Minos is a mobile element of the *Tc*1/*mariner* superfamily isolated from *Drosophila hydrei*. In the September 25 Proceedings of the National Academy of Sciences, Zagoraiou *et al.* report the use of *Minos* transposons in mouse tissues (*Proc Natl Acad Sci USA* 2001, **98:**11474-11478). They generated two transgenic mouse lines: one expressing the *Minos* transposase gene specifically in lymphocytes (under control of the CD2 promoter) and the other carrying a non-autonomous *Minos* transposon. They crossed these mice and used PCR analysis to look for evidence of transposon excision. Excision was detected in the spleen and thymus of double transgenic animals. The authors then used FISH (fluorescent *in situ*hybridisation) to confirm transposition to other chromosomes. This work demonstrates that transposon-based technology may be developed for functional analysis of the mouse genome.

References

1. Transposition of cloned P elements into *Drosophila* germ line chromosomes

2. Mobile Minos elements from *Drosophila hydei* encode a two-exon transposase with similarity to the paired DNA-binding domain.

3. *Proceedings of the National Academy of Sciences* , [http://www.pnas.org]