

Genetic engineering is one of the leading technologies in biological research. Transgenesis, one of the most important genetic engineering technologies, enables to study genetic aspects of organismal systems and thus helps us to better understand the functional characteristics of genomes. Transposons are naturally occurring mobile genetic elements, which can be used to artificially integrate transgenes into host cell genomes. Catalysis of this essential step during transgenesis makes from transposons a useful genetic tool. The aim of this work is to present eukaryotic DNA transposons that transpose in a cut-and-paste-fashion, together with particular mechanisms affecting their function, that can be used as gene delivery system.