Applications of lentiviral vectors for shRNA delivery and transgenesis.

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Public Summary: Lentiviral vectors are potent gene delivery vehicles that enable stable expression of transgenes in both dividing and post-mitotic cells. Development of lentiviral vectors expressing small hairpin RNAs generates a system that can be used to down regulate specific target genes in vivo and in vitro. In this review, we will discuss two examples of in vivo applications for the use of lentiviral vectors expressing shRNAs: Gene therapy of neurological disorders and generation of transgenic knockdown animals.

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