

**Some examples of the applications of the lentiviral vector preparations in research:**

1. Specific gene silencing of the target genes of interest in functional studies, and/or confirmation of the knockout mice phenotype, and validation of the candidate gene/protein revealed by proteomic and microarray data.
2. Over-expression of full-length cDNA or mutant cDNA of the gene interest in functional studies, and gene rescue experiments.
3. Generation of novel stable cell lines that harbor mutations, WT cDNA or shRNA of the target gene of interest.
4. Generation of stable cell lines that express secreted cytokine of interest. The culture supernatant collected in the culture will be a crude but cheap source of the cytokine a laboratory routinely needs in research.