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Licensing opportunity

# H6Pneo, a tuneable lentiviral vector

## The technology

**Variations in gene expression can impact significantly on biological systems and binary control of a gene activity (on/off) may not always be sufficient to study the activity of a gene or protein. Currently there is no simple, precise and cost-effective method of obtaining defined levels of expression of a gene for routine lab experiments.**

**Researchers in Felix Randow's laboratory at the MRC Laboratory of Molecular Biology created a novel tool that allows researchers to obtain different levels of expression of a gene of interest thanks to a series of truncations of the Spleen Focus-Forming Virus (SFFV) promoter in a lentiviral vector (derived from HIV). The levels of expression can be precisely tailored for each gene of interest. The plasmid can be used to generate lentiviruses for experiments in mammalian cells, including human cells.**

## Key features:

Tailor level of gene expression according to your needs

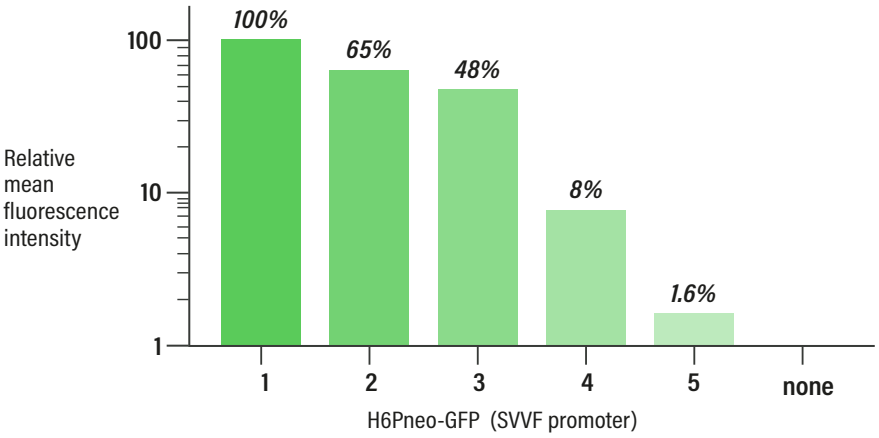
Simplicity of use in routine experiments

Proven to work in HeLa cells and with endogenous in murine embryonic fibroblasts

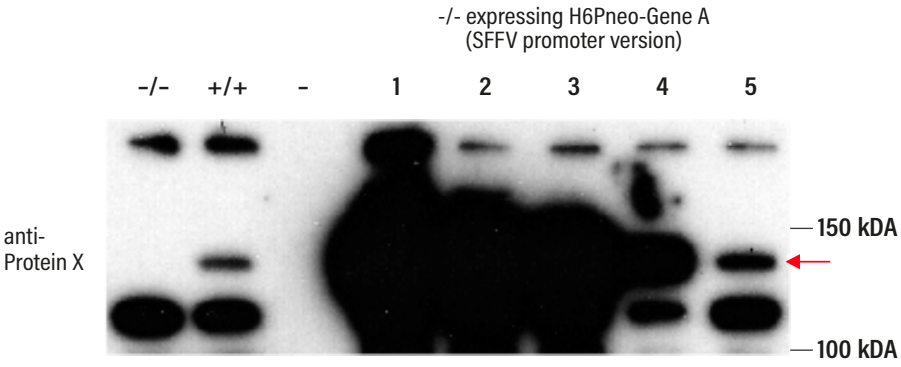
## H6Pneo-GFP

Using the H6Pneo vector with GFP, researchers were able to obtain different levels of expression of GFP. Five lentiviral plasmids, each harbouring GFP and incorporating different sizes of the SFFV promoter, were used to generate lentivirus and transduce HeLa cells at a low multiplicity of infection. Cells were selected with geneticin and analysed by flow cytometry.

## GFP expression in HeLa cells transduced with H6Pneo-GFP lentivirus




## Rescue of endogenous levels of gene expression by H6P vector with shortest SFFV promoter - Murine embryonic fibroblasts from wild type (+/+) and knockout (-/-) mice for gene 'X'.

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**This opportunity is available for licensing or co-development. To discuss please contact:**

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