

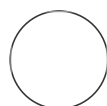


APR 14, 2023

Production of Neuron-Preferential Lentiviral Vectors Protocol

creative-biogene¹

¹Creative Biogene



creative-biogene

ABSTRACT

This protocol provides a method that allows the production of high titer lentivectors that preferentially transduce neurons. The lentiviral vectors produced using this protocol were used in previous studies, including re-introduction of [CD38](#) gene expression into the hypothalamic neurons of CD38 knock-out mice.

OPEN ACCESS

DOI:
dx.doi.org/10.17504/protocols.io.8epv5jqpn1b/v1

Protocol Citation: creative-biogene 2023. Production of Neuron-Preferential Lentiviral Vectors Protocol.
protocols.io
<https://dx.doi.org/10.17504/protocols.io.8epv5jqpn1b/v1>

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working
We use this protocol and it's working

Created: Apr 14, 2023

Last Modified: Apr 14, 2023

PROTOCOL integer ID:
80505

Experiment Summary

- 1 This protocol provides a method that allows the production of high titer [lentivectors](#) that

preferentially transduce neurons. The lentiviral vectors produced using this protocol were used in previous studies, including re-introduction of [CD38](#) gene expression into the hypothalamic neurons of CD38 knock-out mice.

Main Reagents

- 2
 - (1) Human embryonic kidney (HEK) 293T cells
 - (2) Plasmids: lentiviral transfer vector
 - (3) Lentiviral packaging vectors: Packaging mix containing [pLP1](#), [pLP2](#)(pRev), [pLP/VSVG](#)
 - (4) Dulbecco's modified Eagle's medium (DMEM)
 - (5) Penicillin-streptomycin-glutamine (100x)
 - (6) Phosphate-buffered saline (PBS)
 - (7) FBS
 - (8) Polybrene
 - (9) 2.5 M CaCl_2
 - (10) 2x HEPES-buffer (280 mM NaCl, 50 mM HEPES, 1.5 mM Na_2HPO_4 [pH7.05])

3