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What is the interest to provide platforms for
developing and sharing reproducible methods?

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Protocols.io at Springer Nature

SPRINGER NATURE GROUP

Research paper



Introduction

Describes the research question and the hypothesis to be explored



Results

Finding reports with experimental data compiled into charts or figures

Discussion

Results are interpreted in relation with published evidence



Method

Experimental design of the study and list of procedures performed (protocols)

INTRO
10%

RESULTS
50%

DISCUSSION
26%

METHODS
14%



Research protocol

(Springer Protocols)

Introduction

Describes the protocol and its range of applications

Materials

List the compositions of all buffers, solutions and equipment needed, with quantities used and operation instructions

Method

Detailed and chronological explanation of the individual stages of the technique, with timings and critical steps



INTRO
10%

MATERIALS
13%

METHODS
46%

NOTES
32%



Notes

Recommendations and details to implement the protocols

Illustrative example based on the paper CRISPR/Cas9 system targeting regulatory genes of HIV-1 inhibits viral replication in infected T-cell cultures. Youdai Ophinni, Mari Inoue, Tomohiro Kotaki? & Masanori Kameoka, Scientific Reports (2018) and protocol Beads-on-a-String on a Bead: Reconstitution and Analysis of Chromatin on a Solid Support, Raphael Sandaitzopoulos and Peter B. Becker, Chromatin Protocols, Methods in Molecular Biology, vol. 1288 (2015)

Example: experimental procedure is heavily condensed in research papers



RNA Vaccines pp 193–200 | [Cite as](#)

Home > RNA Vaccines > Protocol

Enhanced Delivery of DNA or RNA Vaccines by Electroporation

[Kate F. Broderick Ph.D.](#) & [Laurent M. Humeau](#)

Protocol | [First Online: 17 December 2016](#)

5270 Accesses | 17 Citations

Part of the [Methods in Molecular Biology](#) book series (MIMB, volume 1499)

frontiers | Frontiers in Virology

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Elicitation of immune responses against Nipah virus by an engineered synthetic DNA vaccine

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Six to eight-week-old female C57BL/6 mice (Charles River, USA) were used for all the experiments and were maintained in specific pathogen-free conditions (Wistar IACUC# 112785). Mice were immunized with 25µg of pVax1 empty vector or NiV-F or NiV-G plasmids into the anterior tibialis (TA) muscle,

followed by the delivery of two 0.1 Amps of triangulated square-wave pulses per insertion with 3P CELLECTRA[®] adaptive constant current enhanced electroporation (EP) delivery device (Inovio Pharmaceuticals, USA) as described previously (28).

