

NIH AIDS Reagent Program

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DATA SHEET

Reagent: HIV-CRISPR Vector

Catalog Number: 13567

Lot Number: 190443

Release Category: C

Provided: 5 μg of dried purified DNA stabilized in DNAstable *Plus*

Cloning Vector: A modified version of lentiCRISPR v2 (Addgene #52961)

Ampicillin resistant

Description: The HIV-CRISPR vector is a modified version of the lentiCRISPRv2 lentiviral vector that

expresses Cas9 and sgRNAs for gene knockout. The lentiCRISPRv2 lentiviral vector (Addgene #52961) has been modified to encode a full-length HIV-1 LTR, thereby allowing for integration of transcription- and HIV packaging-competent HIV-CRISPR

lentiviral genomes upon transduction of cells.

Special Characteristics:

This construct is 15,273 bp including the insert.

HIV-CRISPR was created by synthesizing the full-length HIV-1LAI LTR and replacing the SIN (Self Inactivating) 3'LTR that contains a large deletion in the U3 region. The original backbone and associated cloning protocols can be found at Addgene (#52961).

HIV-CRISPR is used to perform a virus-packageable CRISPR screen in which Cas9 and sgRNAs are expressed in cells after transduction. Full-length HIV-CRISPR genomes are transcribed in cells and can be packaged in trans by any infecting HIV or closely-related primate lentiviruses. The vector encodes Puromycin resistance for stable selection of transduced cells.

Contributor provided sequence file

Plasmids can be propagated in STBL2 cells and grown at 37° C. Larger plasmids may benefit from growth at 30° C. This construct may also be grown in other competent

cells.

This reagent is currently being provided as dried purified DNA stabilized in DNAstable

ALL RECIPIENTS OF THIS MATERIAL MUST COMPLY WITH ALL APPLICABLE BIOLOGICAL, CHEMICAL, AND/OR RADIOCHEMICAL SAFETY STANDARDS INCLUDING SPECIAL PRACTICES, EQUIPMENT, FACILITIES, AND REGULATIONS. NOT FOR USE IN HUMANS.

REV: 10/01/2020 Page 1 of 2

PLUS. Please see the notice for additional information and the protocol for reconstitution of dried DNA reagents. <u>Dried DNA Notice</u>

Recommended Storage:

Keep the reagent at room temperature in a dry storage cabinet or in a moisture barrier $\dot{\mbox{}}$

bag.

Contributor: Drs. Molly OhAinle and Michael Emerman

References: OhAinle, M., Helms, L., Vermeire, J., Roesch, F., Humes, D., Basom, R., Delrow, J. J.,

Overbaugh, J. and Emerman, M. (2018). A virus-packageable CRISPR screen identifies host factors mediating interferon inhibition of HIV. Elife, 7. doi:10.7554/eLife.39823

PUBMED

NOTE: Acknowledgment for publications should read "The following reagent was obtained

through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-CRISPR Vector from Drs. Molly OhAinle and Michael Emerman (cat# 13567)." Also include the

reference cited above in any publications.

Scientists at for-profit institutions or who intend commercial use of this reagent must contact the Office of Business Development & Strategy at the following email address: MTA@fredhutch.org, before the reagent can be

released.

Last Updated: October 01, 2020

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REV: 10/01/2020 Page 2 of 2