



## NIH AIDS Reagent Program

20301 Century Boulevard  
Building 6, Suite 200  
Germantown, MD 20874  
USA

Phone: 240 686 4740  
Fax: 301 515 4015  
aidsreagent.org

### DATA SHEET

<b>Reagent:</b>	Packageable ISG CRISPR Knockout Assembly (PIKAHIV) Library
<b>Catalog Number:</b>	13566
<b>Lot Number:</b>	200318
<b>Release Category:</b>	C
<b>Provided:</b>	5 µg of dried purified DNA stabilized in DNASTable <i>Plus</i>
<b>Cloning Site:</b>	BsmBI cloning site  The size of the inserted oligo sequences are 20 bp.
<b>Cloning Vector:</b>	HIV-CRISPR (cat# 13567)  Ampicillin resistant
<b>Description:</b>	The PIKAHIV library is an assembly of 15,348 sgRNA sequences in the HIV-CRISPR vector backbone (cat# 13567) that target 1905 human Interferon-Stimulated Genes (ISGs) as well as a set of 200 Non-Targeting Control (NTC) sgRNA sequences. This library is used to screen for genes important to infection by HIV and related primate lentiviruses.
<b>Special Characteristics:</b>	Introduction of the library through lentiviral transduction of the PIKAHIV library leads to a population of Knockout cells. Infection of these HIV-CRISPR/PIKAHIV-containing cells with HIV or related primate lentiviruses leads to packaging in trans of the HIV-CRISPR genomes in each cell by budding HIV viruses. The relative replication efficiency in Knockout cells can be read out by deep sequencing of HIV-CRISPR genomes packaged by HIV virions.  The DNA can be amplified according to the "Library Amplification Protocol" instructions for a related library found at: <a href="#">Addgene's pooled library protocol</a>  This reagent is currently being provided as dried purified DNA stabilized in DNASTable <i>PLUS</i> . Please see the notice for additional information and the protocol for reconstitution of dried DNA reagents. <a href="#">Dried DNA Notice</a>

---

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.

**Recommended Storage:** Keep the reagent at room temperature in a dry storage cabinet or in a moisture barrier bag.

**Contributor:** Drs. Molly Ohainle, Michael Emerman, Julie Overbaugh and Patrick Paddison

**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: Packageable ISG CRISPR Knockout Assembly (PIKAHIV) Library from Drs. Molly Ohainle, Michael Emerman, Julie Overbaugh and Patrick Paddison (cat# 13566)." 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](mailto:MTA@fredhutch.org), before the reagent can be released.**

**Last Updated:** October 01, 2020

---

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.