Simian Immunodeficiency Virus Infectious Molecular Clone pSIVsmE660-807-16w Env

Catalog No. HRP-20096

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For research use only. Not for use in humans.

Contributor and Manufacturer:

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Product Description:

HRP-20096 is a full-length, infectious molecular clone of the simian immunodeficiency virus (SIV), SIVsmE660-807-16w Env which is available through NIH HIV Reagent Program (HRP-20121).[1,2,3] SIVsmE660-807-16w Env is a chimeric variant of SIVsmE660-FL14 (HRP-20120; GenBank: JQ864087.1) encoding envelope glycoprotein gene (GenBank: JQ864161)) cloned at 16 weeks following infection of an FL14-inoculated macaque and exhibits Tier 2 moderate neutralization antibody resistance.[1,2] The plasmid encodes full-length, replication-competent virus in a pUC19 vector backbone. The beta-lactamase gene, *bla*, provides transformant selection through ampicillin resistance in *Escherichia coli* (*E. coli*). The pSIVsmE660-807-16w Env insert is approximately 10,300 base pairs and the resulting size of the plasmid is approximately 13,000 base pairs. The insert sequence is provided on the NIH HIV Reagent Program webpage.

Material Provided:

Each vial contains plasmid DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA). The DNA concentration and volume provided are shown on the Certificate of Analysis. The vial should be centrifuged prior to opening. Note: The contents of the vial should be used to transform the plasmid in *E. coli* prior to mammalian expression.

Packaging/Storage:

HRP-20096 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -80°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH HIV Reagent Program, NIAID, NIH: Simian Immunodeficiency Virus Infectious Molecular Clone pSIVsmE660-807-16w Env, HRP-20096, contributed by Dr. Vanessa M. Hirsch."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories (BMBL). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the NIH HIV Reagent Program Material Transfer Agreement (MTA). The MTA is available on our Web site at www.hivreagentprogram.org.

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References:

1. Hirsch V. M., Personal Communication.
2. Wu, F., et al. "SIV Infection Duration Largely Determines Broadening of Neutralizing Antibody Response in Macaques." J. Clin Invest. 130 (2020): 5413-5424. PubMed: 32663192.
3. Wu, F., et al. "Sequential Evolution and Escape from Neutralization of Simian Immunodeficiency Virus SIVsmE660 Clones in Rhesus Macaques." J. Virol. 86 (2012): 8835-8847. PubMed: 22696650.