



Product Information Sheet for HRP-20116

Simian Immunodeficiency Virus, SIVsmE543-3

Catalog No. HRP-20116

This reagent is the tangible property of the U.S. Government.

Lot No. 70051401

For research use only. Not for use in humans.

Contributor and Manufacturer:

Vanessa M. Hirsch, D.V.M., D.Sc., Laboratory of Molecular Biology, National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), Bethesda, Maryland, USA

Product Description:

VIRUS CLASSIFICATION: *Retroviridae, Lentivirus*

SPECIES: Simian immunodeficiency virus

STRAIN/ISOLATE: SIVsmE543-3

ORIGINAL SOURCE: Simian immunodeficiency virus (SIV), SIVsmE543-3 is an infectious viral clone that originated from peripheral blood mononuclear cells (PBMC) obtained late in disease from an immunodeficient rhesus macaque (E543) that developed SIV-induced encephalitis (SIVE) upon inoculation of SIVsmF236.^{1,2}

COMMENTS: SIVsmE543-3 is two passages from its origin in a naturally infected sooty mangabey.¹ This stock was generated by expansion in pig-tailed macaque (PT71) and titrated for infectivity in rhesus macaques following intravenous passage.¹ It is infectious and pathogenic in rhesus and PT macaques and is restricted by rhesus TRIM5 α alleles, TRIM5^{TFP} and TRIM5^{Cyp}.¹ SIVsmE543-3 is highly resistant to neutralizing antibodies. The complete genome of strain SIVsmE543-3 has been sequenced (GenBank: [U72748.2](#)).

Material Provided:

Each vial contains approximately 1.0 mL of supernatant from PT macaque PBMC infected with SIVsmE543-3. The virus supernatants were prepared by centrifugation followed by filtration through a 0.45 μ m filter. The TCID₅₀ titer in TZM-bl cells was 3,000 infectious units (IU) per mL. HRP-20116 has not been tested for mycoplasma contamination.¹

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:

HRP-20116 was packaged aseptically in plastic cryovials. The product is provided frozen and should be stored at -100°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended.

Freeze-thaw cycles should be avoided.

Growth Conditions:

HOST: PT macaque PBMC

GROWTH MEDIUM: RPMI 1640 medium supplemented with 10% heat-inactivated fetal bovine serum

INFECTION: Cells should be 70% to 90% confluent

INCUBATION: 10 to 14 days at 37°C and 5% CO₂

Citation:

Acknowledgment for publications should read “The following reagent was obtained through the NIH HIV Reagent Program, NIAID, NIH: Simian Immunodeficiency Virus, SIVsmE543-3, HRP-20116, contributed by Dr. Vanessa M. Hirsch.”

Biosafety Level: 2

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](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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.

While the NIH HIV Reagent Program uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use, and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure the authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to the NIH HIV Reagent Program are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its

NIH HIV Reagent Program

www.hivreagentprogram.org

E-mail: contact@HIVReagentProgram.org

Tel: 888-487-0727 | Fax: 703-365-2898

© 2022 American Type Culture Collection (ATCC)

All rights reserved.

HRP-20116_07SEP2022

Page 1 of 2



Product Information Sheet for HRP-20116

derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Hirsch, V. M., Personal Communication.
2. Hirsch, V., et al. "A Molecularly Cloned, Pathogenic, Neutralization-Resistant Simian Immunodeficiency Virus, SIVsmE543-3." *J. Virol.* 71 (1997): 1608-1620. PubMed: 8995688.

ATCC® is a trademark of the American Type Culture Collection.



NIH HIV Reagent Program

www.hivreagentprogram.org

E-mail: contact@HIVReagentProgram.org

Tel: 888-487-0727 | Fax: 703-365-2898

© 2022 American Type Culture Collection (ATCC)

All rights reserved.

HRP-20116_07SEP2022

Page 2 of 2