



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	Resurfaced stabilized core 3 (RSC3) expression vector
Catalog Number:	12279
Lot Number:	130010
Release Category:	C
Provided:	5 µg of dried purified DNA stabilized in DNASTable <i>PLUS</i>
Cloning Site:	Please see plasmid map for cloning site; orientation is 5' to 3'. The size of the insert is 989 base pairs.
Cloning Vector:	CMV8x/R
Description:	This expression vector produces the protein RSC3 (cat# 12042). This protein was designed to preserve the antigenic structure of the CD4 binding site of gp120 while removing other antigenic regions. Resurfaced Stabilized Core 3 (RSC3) is based on the HXB2 Ds12F123 stabilized core. The variable regions 1 - 3 are removed.
Special Characteristics:	The size of the insert is about 1000 base pairs. The size of the cloning vector including the insert is 5503 base pairs. The expression vector contains a leader sequence, RSC3, Avi-tag, and a 6xHis tag driven by a CMV promoter. Contributor provided sequence information Contributor provided plasmid map Plasmid map and sequence file lot 130010 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. Dried DNA Notice
Recommended Storage:	Keep the reagent at room temperature in a dry storage cabinet or in a moisture barrier bag.

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.

Contributor: Zhi-Yong Yang, Gary Nabel, and John Mascola

References: Wu X, Yang ZY, Li Y, HogerCorp CM, Schief WR, Seaman MS, Zhou T, Schmidt SD, Wu L, Xu L, Longo NS, McKee K, O'Dell S, Louder MK, Wycuff DL, Feng Y, Nason M, Doria-Rose N, Connors M, Kwong PD, Roederer M, Wyatt RT, Nabel GJ, Mascola JR. Rational design of envelope identifies broadly neutralizing human monoclonal antibodies to HIV-1. Science. 2010 Aug 13;329(5993):856-61. [Abstract](#)

Wu X, Zhou T, Zhu J, Zhang B, Georgiev I, Wang C, Chen X, Longo NS, Louder M, McKee K, O'Dell S, Peretto S, Schmidt SD, Shi W, Wu L, Yang Y, Yang ZY, Yang Z, Zhang Z, Bonsignori M, Crump JA, Kapiga SH, Sam NE, Haynes BF, Simek M, Burton DR, Koff WC, Doria-Rose NA, Connors M; NISC Comparative Sequencing Program, Mullikin JC, Nabel GJ, Roederer M, Shapiro L, Kwong PD, Mascola JR. Focused evolution of HIV-1 neutralizing antibodies revealed by structures and deep sequencing. Science. 2011 Sep 16;333(6049):1593-602. [Abstract](#)

(Reference for CMV/R plasmid): Barouch DH, Yang ZY, Kong W-P, Koriath-Schmitz B, Sumida SM, Truitt DM, Kishko MG, Arthur JC, Miura A, Mascola JR, Letvin NL, Nabel GJ. A human T-cell leukemia virus type 1 regulatory element enhances the immunogenicity of human immunodeficiency virus type 1 DNA vaccines in mice and nonhuman primates. J. Virol. 2005 Jul;79(14):8828-34 [Abstract](#)

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: RSC3 expression vector (Cat #12279) from Drs. Zhi-Yong Yang, Gary Nabel, and John Mascola." Also include the references cited above in any publications.

Scientists at for-profit institutions or who intend commercial use of this reagent must contact: The Office of Technology Development, NIAID, 6610 Rockledge Drive, Suite 2800, MSC 6606, Bethesda, MD, 20892-6606, Tel: 301-496-2644, Fax: 301-402-7123, before the reagent can be released.

Strictly limited to 2 aliquots per year. Larger requests require contributor approval.

Last Updated: February 14, 2017

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