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DATA SHEET

Reagent:	HIV-1 RSC3 Δ371I Recombinant Protein
Catalog Number:	12043
Lot Number:	130007
Provided:	200 µg (0.177 ml) per vial at 1.120 mg/ml in PBS.
Molecular Weight:	Appeared as a 65 KD protein (Calculated M.W. is 36.5 KD).
Purity:	>95%
Description:	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 mutation bore on RSC3 Δ371I greatly diminishes the binding of CD4bs mAbs to the protein. The variable regions 1 - 3 are removed. For more details, please see Wu et al. 2010.
Special Characteristics:	Heavily glycosylated protein. <i>Applications:</i> CD4 binding site (CD4bs) antibody detection by ELISA. This protein is produced using the NIH-ARP HIV-1 RSC3 ?371I expression vector (cat# 12280). Alternative names: RSC3Δ371I
Recommended Storage:	Stable at 4°C for at least one month. Aliquot and store at -80°C for long-term storage.
Contributor:	Drs. Zhi-Yong Yang, Peter Kwong, Gary Nabel and John Mascola

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.

References:

Xueling Wu, Zhi-Yong Yang, Yuxing Li, et al: Rational Design of Envelope Identifies Broadly Neutralizing Human Monoclonal Antibodies to HIV-1. *Science*, **329**: 856-861 (2010). [Abstract](#)

Rebecca M. Lynch, Lillian Tran, Mark K. Louder, et al: The Development of CD4 Binding Site Antibodies during HIV-1 Infection.: The Development of CD4 Binding Site Antibodies during HIV-1 Infection *J Virol*. 2012 July; 86(14): 7588–7595. doi: 10.1128/JVI.00734-12. [Abstract](#). This article details the differences of binding between the 4 RSC3 proteins ARP offers and various broadly neutralizing antibodies. Please note [Table 1](#)

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 RSC3 Δ3711 Recombinant Protein from Drs. Zhi-Yong Yang, Peter Kwong, Gary Nabel (cat #12043)." 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 INSTITUTION AND/OR PROVIDER NAME at the following email address: NIAIDAIDSReagent@niaid.nih.gov , before the reagent can be released.

Last Updated:

October 10, 2018

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