

DATA SHEET

For research use only. Not for use in humans.

Reagent:	Human Immunodeficiency Virus Type 1 RSC3 Δ371I Recombinant Protein
Catalog Number:	ARP-12043
Lot Number:	180216
Provided:	Each vial of ARP-12043 contains approximately 250 µg of lyophilized, purified recombinant protein. Purity was >90% as determined by SDS-PAGE.
Description:	ARP-12043 (RSC3 Δ371I) is a CD4 binding site (CD4bs) knockout mutant of RSC3 (Resurfaced Stabilized Core 3), which is derived from the Ds12F123 stabilized core of gp120 protein of Human Immunodeficiency Virus Type 1 (HIV-1), strain HXB2. A mutation at position 371 greatly diminishes the binding of CD4bs monoclonal antibodies to the protein. In addition, the variable regions 1 to 3 are removed.
Special Characteristics:	ARP-12043 is a heavily glycosylated protein. Suggested applications include CD4bs antibody detection by differential ELISA using RSC3 and RSC3 Δ371I. ARP-12043 was produced using the HIV-1 RSC3 Δ371I expression vector (available as ARP-12280).
Recommended Storage:	ARP-12043 should be stored at -80°C or colder immediately upon arrival. Avoid freeze-thaw cycles as reagent degradation may result.
Contributors:	Zhi-Yong Yang, Peter Kwong, Gary Nabel and John Mascola
References:	Wu, X., et al. "Rational Design of Envelope Identifies Broadly Neutralizing Human Monoclonal Antibodies to HIV-1." <i>Science</i>. 329(2010):856-861. PubMed: 20616233. Lynch, R.M., et al. "The Development of CD4 Binding Site Antibodies During HIV-1 Infection." <i>J Virol</i>. 86(2012):7588-7595. PubMed: 22573869.
Citation:	Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Human Immunodeficiency Virus Type 1 RSC3 Δ371I Recombinant Protein, ARP-12043."
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). Current Edition. Washington, DC: U.S. Government Printing Office.
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**HIV REAGENT
PROGRAM**

