

## NIH AIDS Reagent Program

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## **DATA SHEET**

34.1 mAb Expressing CHO Cells (8ED) Reagent:

D

Catalog Number: 13578

Lot Number: 200305

Release Category:

Provided: 600 µL of cells

Post thaw cell count =  $4.28 \times 10^6$  cells/vial

Post thaw cell viability = 81%

Cell Type: Chinese hamster ovary cell line derived from CHO-S cells.

**Propagation** Medium:

CD-CHO Medium; 8mM Glutamax

Freeze Medium: Gibco Recovery™ Cell Culture Freezing Medium

Morphology: Adherent epithelial-like Cell Line

Sterility: Negative for mycoplasma, bacteria, and fungi

**Description:** Stable CHO-s Cell line expressing the 34.1 murine monoclonal antibody specific for the

N-terminus of Herpes Simplex type 1 glycoprotein D (gD).

Special

The 34.1 monoclonal antibody was produced in mice, the light and heavy chain genes Characteristics: were sequenced and incorporated into a vector for the stable expression of the 34.1

monoclonal antibody in CHO-s cells. The signal sequence and mature 27 amino acid sequence of (gD) has been widely used as to facilitate the secretion and purification of HIV envelope proteins. This sequence is also known to bind to the cellular receptor for

Herpes Simplex Virus.

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.

REV: 12/07/2020 Page 1 of 2 Recommended Storage:

Keep the reagent in liquid nitrogen.

Contributor:

Dr. Phillip Berman

References:

Byrne, G., O'Rourke, S. M., Alexander, D. L., Yu, B., Doran, R. C., Wright, M., Chen, Q., Azadi, P. and Berman, P. W. (2018). CRISPR/Cas9 gene editing for the creation of an MGAT1-deficient CHO cell line to control HIV-1 vaccine glycosylation. PLoS Biol, (8), e2005817. doi:10.1371/journal.pbio.2005817 PUBMED

O'Rourke, S. M., Byrne, G., Tatsuno, G., Wright, M., Yu, B., Mesa, K. A., Doran, R. C., Alexander, D. and Berman, P. W. (2018). Robotic selection for the rapid development of stable CHO cell lines for HIV vaccine production. PLoS ONE, (8), e0197656. doi:10.1371/journal.pone.0197656 PUBMED

O'Rourke, S. M., Yu, B., Morales, J. F., Didinger, C. M., Alexander, D. L., Vollmers, C. and Berman, P. W. (2019). Production of a recombinant monoclonal antibody to Herpes Simplex Virus glycoprotein D for immunoaffinity purification of tagged proteins. J Immunol Methods, 31-38. doi:10.1016/j.jim.2018.11.015 PUBMED

Doran, R. C., Yu, B., Wright, M., O'Rourke, S. M., Yin, L., Richardson, J. M., Byrne, G., Mesa, K. A. and Berman, P. W. (2018). Development of a Stable MGAT1(-) CHO Cell Line to Produce Clade C gp120 With Improved Binding to Broadly Neutralizing Antibodies. Front Immunol, 2313. doi:10.3389/fimmu.2018.02313 PUBMED

Li, S. W., Yu, B., Byrne, G., Wright, M., O'Rourke, S., Mesa, K. and Berman, P. W. (2019). Identification and CRISPR/Cas9 Inactivation of the C1s Protease Responsible for Proteolysis of Recombinant Proteins Produced in CHO Cells. Biotechnol Bioeng, (9), 2130-2145. doi:10.1002/bit.27016 PUBMED

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: 34.1 mAb Expressing CHO Cells (8ED) from Dr. Phillip Berman (cat# 13578)." Also include the references cited above in any publications.

**Last Updated** 

December 07, 2020

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