DATA SHEET

Reagent: HIV-1 Bal gp120 Secreting CHO Cells (CHO-s-MGAT1-Protease-)

Catalog Number: 13573

Lot Number: 200273

Release Category: D

Provided: 600 µL of cells

Post thaw cell count = 5.2 x 10⁶ cells/vial

Post thaw cell viability = 45%

Cell viability increased to 92% after 19 days in culture.

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

Propagation Medium: CD OptiCHO 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: Suspension adapted cell line useful for the production of intact unclipped Bal-rgp120.
Special Characteristics: This high yielding cell line secretes high levels (0.5 g/L) Bal-rgp120 into cell culture medium when grown in shake flask cultures. This protein was produced in a cell line that incorporates a mutation in the MGAT1 gene and the CHO cell protease gene responsible for the clipping of HIV envelope proteins from clade B viruses in the V3 domain. Clade B Bal-rgp120 differs from most clade B gp120 immunogens described to date in its ability to bind multiple broadly neutralizing antibodies including PG9, PGT128, 10-1074, PGT121, and VRC01. This protein is expressed with an N-terminal gD purification tag and is very similar to the MN-rgp120 used in the VaxGen and RV144 HIV vaccine trials. However it differs from most gp120s used in clinical trials to date in that exhibits superior binding of broadly neutralizing monoclonal antibodies by virtue of the fact that N-linked glycosylation is restricted primarily to mannose-5 and earlier intermediates in the N-linked glycosylation pathway. Because of restricted glycosylation, gp120 from this cell line can be purified by conventional column chromatography without the need for antibody or lectin affinity chromatography. It is potentially suitable for GMP production.

Recommended Storage: Keep the reagent in liquid nitrogen.

Contributor: Dr. Phillip Berman

References:

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 Bal gp120 Secreting CHO Cells (CHO-s-MGAT1-Protease-) from Dr. Phillip Berman (cat# 13573)." Also include the references cited above in any publications.

Last Updated November 03, 2020

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.