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DATA SHEET

Reagent: HIV-1 NL4-3 gp120 secreting CHO Cells

Catalog Number: 4125

Lot Number: 150046

Release Category: C

Provided: 4.5×10^6 cells/ml. Viability, 91%.

Cell Type: CHO cells

Propagation Medium: DMEM supplemented with 1% L-glutamine, 0.5% pen-strep, and 0.2% proline, 90%; fetal bovine serum, 10%. Selection can be imposed by addition of 1.0 mg/ml G418 and should be added when preparing cultures for freezing. G418 can be omitted when making large scale cultures for protein expression / purification. Alternatively cells can be grown in Alpha MEM media (without nucleosides, Gibco Cat# 12561-023) plus 10% dialyzed Fetal Bovine Serum (Hyclone Cat#A-1101-L), Pen/Strep/Glut and 80 nM methotrexate. For large scale production of protein cells are grown in the absence of selective agents.

Freeze Medium: Propagation medium, 70%; fetal bovine serum, 20%; DMSO, 10%.

Growth Characteristics: Split the cells before they become confluent. To harvest supernatant for protein, split at 1:5 such that the flask is 100% confluent after three days, and at this point harvest supernatant. If large amounts of protein are needed, the cells should be grown using hollow fiber bioreactors or spinner flasks. Envelope purification protocol is attached.

Sterility: Negative for mycoplasma, bacteria, and fungi.

Description: These CHO cells secrete NL4-3 gp120.

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.

Special Characteristics:	<p>Expresses gp120 and the extracellular domain of gp41. The processing site is intact. Expressed protein is highly glycosylated, binds CD4 with high affinity and interacts specifically with CXCR4. Protein can be purified using GNA lectin (yields are 20-60%). For comparative purposes, the CHO NL4-3 expression is at least 2-fold less than CHO Uganda gp120 cell line (Cat. # 4699).</p> <p>Protocol:Purification of HIV Envelope Protein</p>
Recommended Storage:	Liquid nitrogen
Contributor:	Dr. James Arthos
References:	<p>Weissman D, Rabin RL, Arthos J, Rubbert A, Dybul M, Swofford R, Venkatesan S, Farber JM, Fauci AS. Macrophage-tropic HIV and SIV envelope proteins induce a signal through the CCR5 chemokine receptor. Nature. 1997 Oct 30;389(6654):981-5. abstract</p>
NOTE:	<p>Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: CHO NL4-3 gp120 from Dr. James Arthos."</p> <p>Scientists at for-profit institutions or who intend commercial use of this reagent must contact the NIH Office of Technology Transfer, Email: NIAIDAIDSReagent@niaid.nih.gov, before the reagent can be released. Please specify the name and a description of the intended use of the reagent.</p>
Last Updated	July 03, 2018

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