

DATA SHEET

For research use only. Not for use in humans.

Reagent: CEM.NKR CCR5+ Cells

Catalog Number: ARP-4376

Lot Number: 190132

Release Category: A

Provided: Each vial of ARP-4376 contains approximately 6.3 × 10⁶ cells in 0.8 mL of freeze medium. Post-

thaw viability was 88%.

Cell Type: ARP-4376 is a line of CEM cells – human CD4+ lymphoblasts.

Propagation Medium: The recommended propagation medium is RPMI 1640 medium supplemented with 10% fetal

bovine serum and 2 mM L-glutamine.

Freeze Medium: The recommended freeze medium is Gibco Recovery Cell Culture Freezing Medium.

Growth Characteristics: ARP-4376 grows as a single-cell suspension with small clumps and should be split 1:10 twice

weekly. Round lymphoid cells are typically seen, and morphology is not very variable.

Sterility: Tests for bacteria, fungi and mycoplasma were negative.

Description: ARP-4376 is comprised of CEM.NKR cells that express human CCR5.

Special Characteristics: CEM.NKR cells (ARP-458) are CEM cells that are resistant to natural killer (NK) cell-mediated

cell lysis. These cells were transduced with a retroviral vector to express human CCR5. Cells do not secrete infectious virus. ARP-4376 is suitable for infection with primary human immunodeficiency virus (HIV) isolates. An alternate name for these cells is CEM.NKR-CCR5.

Recommended Storage: Keep at -100°C or colder, preferably in the vapor phase of a liquid nitrogen freezer.

Contributor: Dr. Alexandra Trkola

References: Howell, D. N., et al. "Natural Killing Target Antigens as Inducers of Interferon; Studies with an

Immunoselected, Natural Killing-Resistant Human T Lymphoblastoid Cell Line," J. Immunol, 134

(1985): 971-976. PubMed: <u>3871222</u>.

Lyerly, H. K., et al. "Anti-GP 120 Antibodies from HIV Seropositive Individuals Mediate Broadly Reactive Anti-HIV ADCC." <u>AIDS Res. Hum. Retroviruses</u> 3 (1987): 409-422. PubMed: <u>2833917</u>.

Trkola, A., et al. "A Cell Line-Based Neutralization Assay for Primary Human Immunodeficiency Virus Type 1 Isolates that Use Either the CCR5 or the CXCR4 Coreceptor." J. Virol. 73 (1999):

8966-8974. PubMed: 10516002.

Citation: Acknowledgment for publications should read "The following reagent was obtained through the

NIH HIV Reagent Program, Division of AIDS, NIAID, NIH: CEM.NKR CCR5+ Cells, ARP-4376,

contributed by Dr. Alexandra Trkola." Also include the references cited in any publication.

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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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