



NIH AIDS Reagent Program

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DATA SHEET

Reagent: Human CD4 Expression Vector (T4-pMV7)

Catalog Number: 158

Lot Number: 01025

Release Category: C

Provided: 1 ml (0.3 ml of bacterial suspension culture mixed with 0.7 ml of sterile 20% glycerol).

Description: A 3 kb pT4B *EcoRI*-*Bam*HI site cDNA insert was cloned into the *EcoRI* site of pMV7. pT4B (Catalog #157) encodes the human CD4 receptor and was originally cloned from human peripheral T lymphocytes. pMV7 contains two LTR repeats of Moloney murine sarcoma virus spanning a unique *EcoRI* site. Also contains the bacterial neomycin phosphotransferase gene (*neo*) fused to the HSV tk promoter, both located downstream of the cloning site.

T4-pMV7 is a recombinant retroviral expression vector expressing the human CD4 receptor in mammalian cells. pMV7 contains two LTR repeats of Moloney murine sarcoma virus spanning a unique *EcoRI* cloning site. pMV7 also contains the bacterial neomycin phosphotransferase gene (*neo*) fused to the HSV thymidine kinase promoter (*tk*), both located downstream of the cloning site.

[Plasmid Map](#)

Special Characteristics: Transfection of T4-pMV7 to a retrovirus helper cell line (AM or psi 2) results in the production of replication-defective recombinant retrovirus.

Recommended Storage: -70°C.

Contributor: Dr. Richard Axel.

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.

References: Maddon PJ, Dalglish AG, McDougal JS, Clapham PR, Weiss RA, Axel R. The T4 gene encodes the AIDS virus receptor and is expressed in the immune system and the brain. *Cell* **47**: 333-348, 1986. Kirschmeier PT, Housey GM, Johnson MD, Perkins AS, Weinstein IB. Construction and characterization of a retroviral vector demonstrating efficient expression of cloned cDNA sequences. *DNA* **7**: 219-225, 1988.

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Human CD4 Expression Vector (T4-pMV7) from Dr. Richard Axel." Also include the appropriate references cited above in any publications. The CD4 gene is in pT4B (catalog #157).

Last Updated: August 03, 2018

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