



## NIH AIDS Reagent Program

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### DATA SHEET

**Reagent:** 10E8 mAb Heavy chain expression vector (CMVR)

**Catalog Number:** 12290

**Lot Number:** 120215

**Release Category:** C

**Provided:** 2.5 µg of plasmid DNA. 0.9 µg/µL, in EB, pH 8.0

**Cloning Site:** Restriction enzymes AgeI and SalI were used to place the insert into the vector. Size of insert is about 500 bp. Please see the plasmid map.

**Cloning Vector:** A PBR322-based AbVec-hIgG1 expression vectors contain a murine immunoglobulin signal peptide sequence and variable-gene cloning sites upstream of the human immunoglobulin heavy chain constant regions followed by an SV40 polyadenylation sequence. Transcription is under the HCMV promoter and clones are selected based on ampicillin resistance. The size of the vector plus the insert is 6.2 Kb.

**Description:** The heavy chain expression vector for the broadly neutralizing antibody, 10E8. The expression vector codes for a signal peptide sequence, variable and constant regions of IgG1 heavy chain expressed under control of the HCMV (human cytomegalovirus immediate-early) promoter.

**Special Characteristics:** 10E8 is a broadly neutralizing HIV-1 antibody against all major subtypes. This plasmid expresses the IgG1 heavy chain of the HIV-1 gp41 mAb 10E8. With 10E8 light chain plasmid (Cat# 12291), or the 7H6 light chain plasmid (Cat# 12293), the 10E8 mAb (Cat# 12294) or the 7H6 mAb (Cat# 12295) can be expressed in 293T cells and purified using a protein-A column (please see references). 10E8 tends to precipitate at 4°C or after -20°C storage, please warm it up at 37°C for 1 hour before use.

[GenBank #JX645769.](#)

[Sequence and vector map](#)

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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.

**Recommended Storage:** -20°C

**Contributor:** Jinghe Huang, Leo Laub, and Mark Connors

**References:** Jinghe Huang, Gilad Ofek, Leo Laub, Mark K. Louder, Nicole A. Doria-Rose, Nancy S. Longo, Hiromi Imamichi, Robert T. Bailer, Bimal Chakrabarti, Shailendra K. Sharma S. Munir Alam, Tao Wang, Yongping Yang, Baoshan Zhang, Stephen A. Migueles, Richard Wyatt, Barton F. Haynes, Peter D. Kwong, John R. Mascola and Mark Connors. Broad and potent neutralization of HIV-1 by a gp41-specific human antibody. Nature (2012) doi:10.1038/nature11544

**NOTE:** Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: mAb 10E8 heavy chain, from Dr. Mark Connors." Also include the reference cited above in any publications. Scientists at for-profit institutions or who intend commercial use of this reagent must contact: The Office of Technology Development, NIAID, 6610 Rockledge Drive, Suite 2800, MSC 6606, Bethesda, MD, 20892-6606, Tel:301-496-2644, Fax: 301-402-7123, before the reagent can be released.

**Last Updated:** September 11, 2014

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