



NIH AIDS Reagent Program

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DATA SHEET

Reagent: Human APOBEC3G Myc His Expression Vector (pHIV-APO3G)

Catalog Number: 9905

Lot Number: 050005

Release Category: C

Provided: 1 µg of dried purified DNA stabilized in DNastable *PLUS*

Cloning Site: BssHII/XhoI cloning site
The size of the insert is 1240 bp.

Cloning Vector: pNL4-3 (Cat# 114)
Ampicillin resistant

Description: An expression vector which produces human APOBEC3G protein under the control of the HIV-1 LTR promoter and requires Tat for expression.

Special Characteristics: This construct is 7941 bp including the insert.
This plasmid expresses biologically active human APOBEC3G derived via PCR from pCDNA-APO3G (Cat# 9904). This vector encodes a 410 amino acid protein (385 residues of APOBEC3G and 25 residues corresponding to the MycHis epitope tag). This construct contains two nucleotide changes, G1448→A and G2071→T, in APOBEC3G resulting in two amino acid changes, S162N and D370Y, relative to the GenBank entries for APOBEC3G([NM_021822](#)) and MDS019([AF182420](#)). Also, note that this plasmid has an extra third band when digested with BssHII/XhoI but this does not affect the expression of the APOBEC3G protein in a Tat dependent manner.
This reagent is currently being provided as dried purified DNA stabilized in DNastable *PLUS*. Please see the notice for additional information and the protocol for reconstitution of dried DNA reagents. [Dried DNA Notice](#)
Plasmids can be propagated in STBL2 cells and grown at 37°C. Larger plasmids may benefit from growth at 30°C.

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: Keep the reagent at room temperature in a dry storage cabinet or in a moisture barrier bag.

Contributor: Drs. Klaus Strebel and Sandra Kao

References: S. Kao, M. A. Khan, E. Miyagi, R. Plishka, A. Buckler-White and K. Strebel. (2003). The human immunodeficiency virus type 1 Vif protein reduces intracellular expression and inhibits packaging of APOBEC3G (CEM15), a cellular inhibitor of virus infectivity. J Virol, 77(21), 11398-407. [PUBMED](#)

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Human APOBEC3G Myc His Expression Vector (pHIV-APO3G) from Drs. Klaus Strebel and Sandra Kao." 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 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.

Last Updated: July 14, 2017

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