



## NIH AIDS Reagent Program

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### DATA SHEET

<b>Reagent:</b>	Human APOBEC3G Myc His Expression Vector (pHIV-APO3G)
<b>Catalog Number:</b>	9905
<b>Lot Number:</b>	032581
<b>Release Category:</b>	C
<b>Provided:</b>	1 µg of plasmid DNA in water (0.1 µg/µL)
<b>Cloning Site:</b>	APOBEC3G gene was cloned into the <i>Bss</i> HII/ <i>Xho</i> I sites of pNL4-3 (Cat# 114). The size of the insert is 1240 bp.
<b>Cloning Vector:</b>	The cloning vector is pNL4-3; the size of the cloning vector including the insert is 7941 bp.
<b>Description:</b>	This plasmid expresses human APOBEC3G under the control of the HIV-1 promoter. Requires Tat for expression. APOBEC3G was cloned by PCR from pcDNA-APO3G (Cat# 9904). Expresses a 409 amino acid protein (384 residues APOBEC3G plus 25 residues MycHis epitope tag). Note: this clone contains two nucleotide changes (G1448→A) & (G2071→T) in APOBEC3G resulting in two amino acid changes (S162N) & (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 but this does not affect the expression of the APOBEC3G protein in a Tat dependent manner.
<b>Special Characteristics:</b>	Expresses biologically active human APOBEC3G under the control of the HIV-1 LTR. Protein expression is Tat-dependent. Vector restricts APOBEC3G expression to HIV-expressing cells.
<b>Recommended Storage:</b>	-70°C
<b>Contributor:</b>	Drs. Klaus Strebel and Sandra Kao.

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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.

**References:** Kao S, Khan MA, Miyagi E, Plishka R, Buckler-White A, Strebel K. 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**:11398-11407, 2003.

**NOTE:** Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: 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](mailto: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 12, 2017

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