

BD Pharmingen™ Technical Data Sheet

pAcGP67-C BACULOVIRUS TRANSFER VECTOR

PRODUCT INFORMATION

Catalog Number:

554758

pAcGP67-C Baculovirus Transfer Vector

Contents:

5 µg in 50 µl

DESCRIPTION

The acidic glycoprotein gp67 (syn.: gp64) is the most abundant envelope surface glycoprotein of the *Autographa californica* nuclear polyhedrosis virus (AcNPV baculovirus), and is essential for the entry of baculovirus particles into susceptible insect cells.¹ Since large amounts of this protein are secreted and anchored to the virus peplomer, its gene contains one of the most effective baculovirus-encoded signal sequences for protein secretion.² Therefore, we have constructed baculovirus transfer vectors (pAcGP67-A, -B, -C) that contain the gp67 signal sequence in front of a multiple cloning site (5'-BamH I, Sma I/Xma I, Xba I or Nco I, EcoR I, Not I, Eag I, Pst I and Bgl II-3'). A gene of choice can be inserted in one of these cloning sites and the protein of interest will be expressed as a gp67 signal peptide fusion protein under the control of the strong baculovirus polyhedrin promoter. This strategy allows the forced secretion of otherwise non-secreted recombinant proteins which may be easily purified when serum-free insect culture medium, BD BaculoGold™ Max-XP Insect Cell Medium (Cat. No. 554761) is used. The transfer vector(s) should be preferentially used in conjunction with BD BaculoGold™ DNA (Cat. No. 554739).

PREPARATION AND STORAGE

The vectors were purified using a silicon bead matrix and dissolved in TE buffer (10 mM Tris-HCl, pH 7.5; 1 mM EDTA). Each vector should be stable for at least 2 years when stored at -20°C.

HANDLING

Amplify the plasmid DNA in *E. coli* strains (DH5α, HB101 or any other suitable strain) under ampicillin selection. Insert your gene of interest into a suitable restriction site that is in frame with the gp67 signal sequence. Do a co-transfection of the recombinant plasmid and BD BaculoGold™ Linearized Baculovirus DNA (Cat. No. 554739) using a susceptible insect cell line (e.g., *Sf9* or *Sf21*) and identify recombinant viruses expressing your protein.

REFERENCES

1. Whitford M., Stewart S., Kuzio J., Faulkner P. 1989. *J. Virol.* 63:1393-1399.
2. Stewart L.M.D, Hirst M., Ferber M.L., Merryweather A.T., Cayley PJ, Possee RD. 1991. *Nature.* 352:85-88.
3. Sambrook, Fritsch, and Maniatis. 1989. *Molecular Cloning*, 2nd edition, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY.

BD Biosciences Pharmingen

www.bdbiosciences.com

| United States | Canada | Europe | Japan | Asia Pacific | Latin America/Caribbean |
|---------------|--------------|---------------|----------------|--------------|-------------------------|
| 877.232.8995 | 888.259.0187 | 32.53.720.211 | 81.24.593.5405 | 65.6861.0633 | 55.11.5185.9995 |

For country-specific contact information, visit www.bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

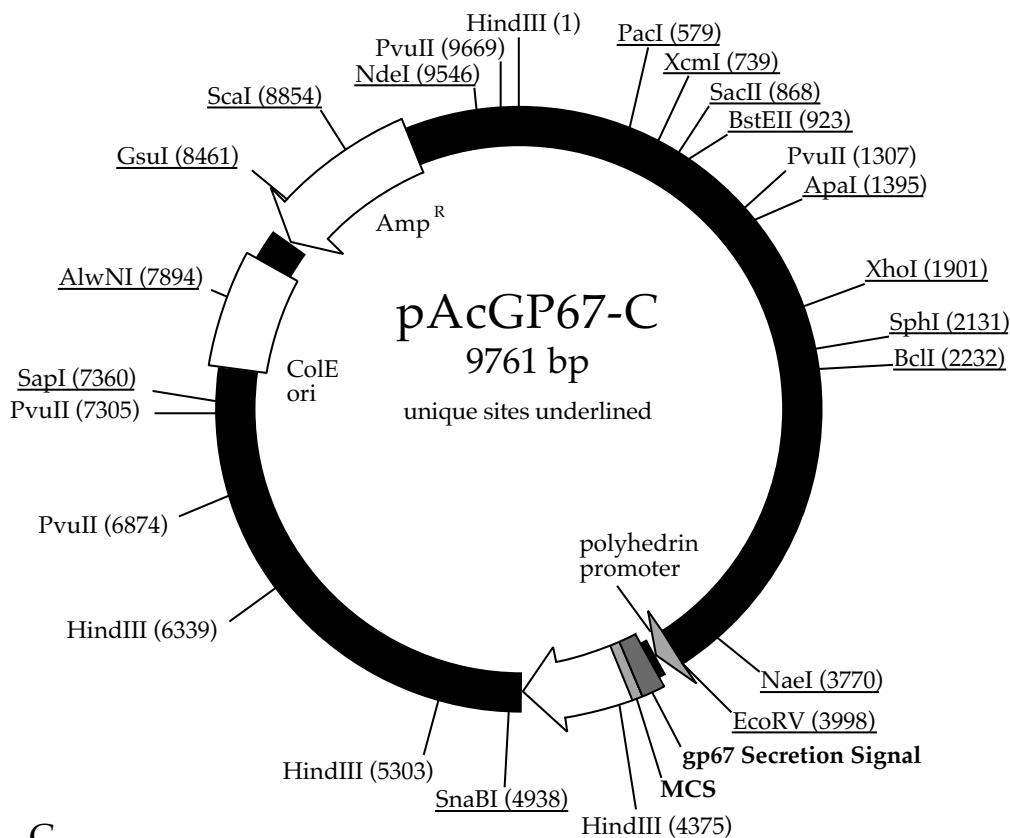
BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2002 BD



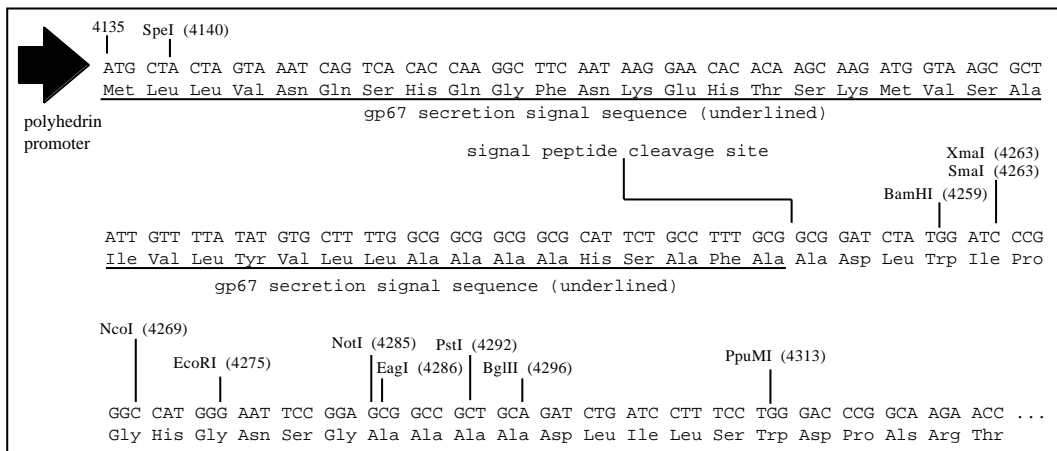
BD

BD Biosciences

pAcGP67-C BACULOVIRUS TRANSFER VECTOR



C



BD Biosciences Pharmingen

www.bdbiosciences.com

United States 877.232.8995 Canada 888.259.0187 Europe 32.53.720.211 Japan 81.24.593.5405 Asia Pacific 65.6861.0633 Latin America/Caribbean 55.11.5185.9995

For country-specific contact information, visit www.bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2002 BD



BD

BD Biosciences