

## Technical Data Sheet

**pAcGP67B Baculovirus Transfer Vector****Product Information**

**Material Number:** 554757  
**Size:** 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. 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. Therefore, we have constructed baculovirus transfer vectors (pAcGP67A, 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. 551411) is used. The transfer vector(s) should be used in conjunction with BD BaculoGold™ DNA (Cat. No. 554739).

**Preparation and Storage**

Store undiluted at -20°C.

The vectors were purified using a silicon bead matrix and dissolved in TE buffer (10 mM Tris-HCl, pH 7.5; 1 mM EDTA).

**Application Notes****Application**

Baculovirus	Routinely Tested
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**Recommended Assay Procedure:**

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. See figure for plasmid map. Perform 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.

Sequence information can be found on the BD Bioscience web site at [http://www.bdbiosciences.com/support/vector\\_sequences/](http://www.bdbiosciences.com/support/vector_sequences/). For detailed protocols refer to the Baculovirus Expression Vector System Manual, 6th edition on our web site at <http://www.bdbiosciences.com/pdfs/manuals/98-6088-1F.pdf>.

**Suggested Companion Products**

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
554739	Linearized Baculovirus DNA	5 transfections	(none)
551411	Max-XP Serum-Free Insect Cell Medium	1 liter	(none)
560129	Transfection Kit	5 transfections	(none)

**Product Notices**

- Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.

**BD Biosciences**

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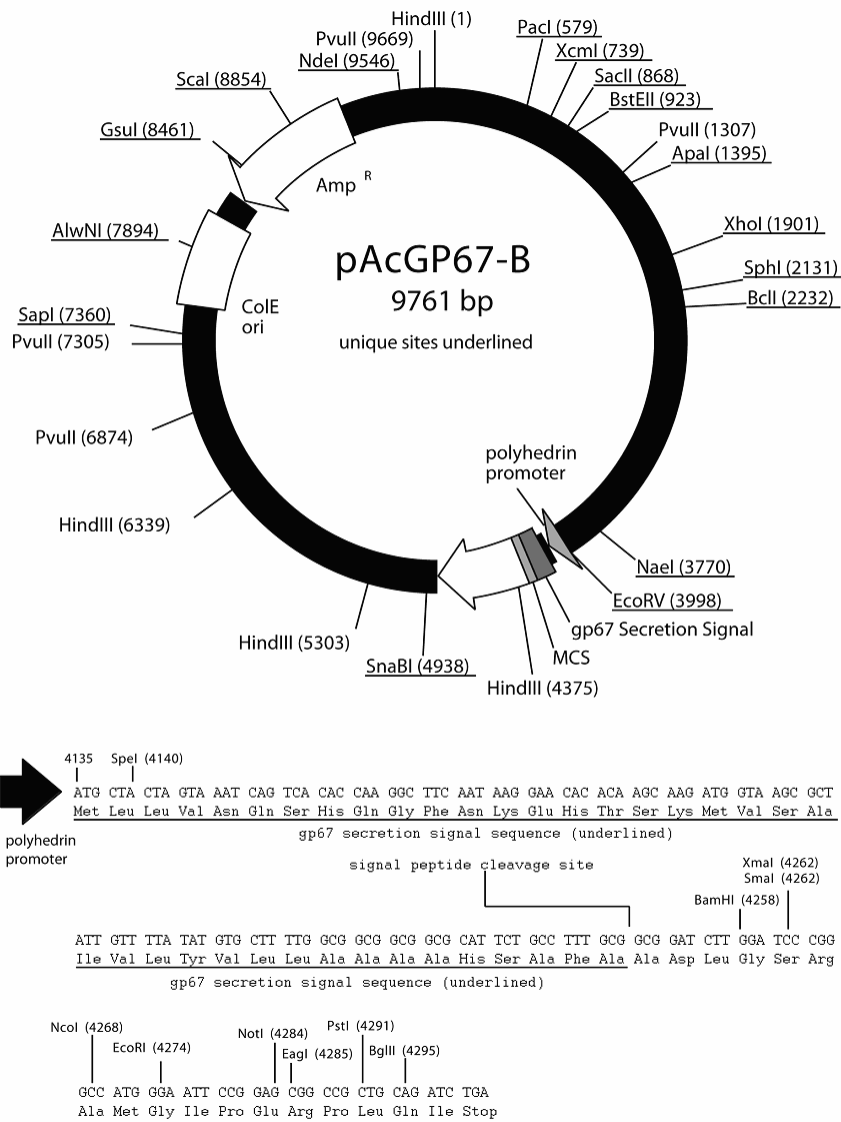
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## References

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- Whitford M, Stewart S, Kuzio J, Faulkner P. Identification and sequence analysis of a gene encoding gp67, an abundant envelope glycoprotein of the baculovirus *Autographa californica nuclear polyhedrosis virus*. *J Virol*. 1989; 63(3):1393-1399.(Biology)