

Technical Data Sheet

pAcG3X Baculovirus Transfer Vector**Product Information**

Material Number: 554773
Size: 20 µg in 20 µl

Description

The pAcG3X baculovirus transfer vector is a derivative of the pAcCL29 vector. Foreign genes may be expressed as glutathione S-transferase (GST) fusion proteins when cloned into one of the available restriction enzyme sites (BamH I, Sma I or EcoR I). All foreign inserts **must be in frame** with the GST open reading frame (ORF). The GST fusion protein expression is under the control of the strong AcNPV polyhedrin promoter. GST fusion proteins have a high affinity for reduced glutathione allowing single-step protein purification using glutathione beads. After purification, the GST affinity tag can be removed by incubating the fusion protein in the presence of factor Xa. This vector is a polyhedrin locus-derived vector and is compatible with the BD BaculoGold™ Transfection Kit (Cat. No. 560129).

Preparation and Storage

Store undiluted at -20°C.

The plasmid DNA was prepared 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
-------------	------------------

Recommended Assay Procedure:

For expression of a fusion protein under the polyhedrin promoter, insert the gene of interest into a suitable restriction site that is in frame with the GST ORF in the vector. Transform and amplify the plasmid DNA in E. coli strains (DH5α, HB101 or any other suitable strain) under ampicillin selection and purify using standard protocols. For construction of recombinant virus, perform a co-transfection of the purified, recombinant pAcG3X vector and linearized baculovirus DNA (BD BaculoGold™ Linearized DNA Cat. No. 554739), into a susceptible cell line (Sf9 or Sf21). Monoclonal antibodies to GST (Cat. No. 554805) may be used to detect recombinant GST-fusion proteins by western blot analysis. Sequence information for vectors can be found on the BD Bioscience web site at http://www.bdbiosciences.com/support/vector_sequences/. For detailed procedures, refer to our online protocols or 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>
560129	Transfection Kit	5 transfections	(none)
560137	GST Purification Kit	1 box	(none)
554805	Purified Mouse Anti-Glutathione S-Transferase	0.1 mg	G172-1138

Product Notices

- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

BD Biosciences

bdbiosciences.com

United States 877.232.8995 Canada 888.259.0187 Europe 32.53.720.550 Japan 0120.8555.90 Asia Pacific 65.6861.0633 Latin America/Caribbean 55.11.5185.9995

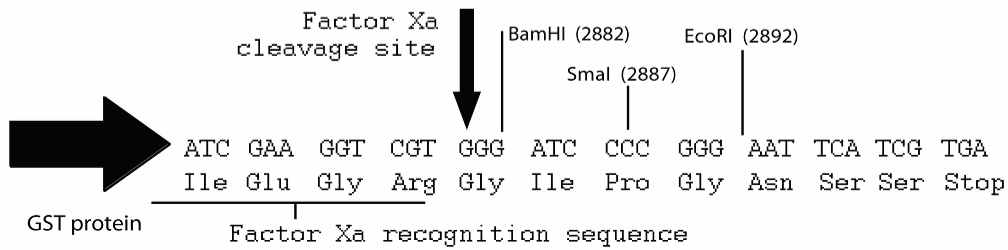
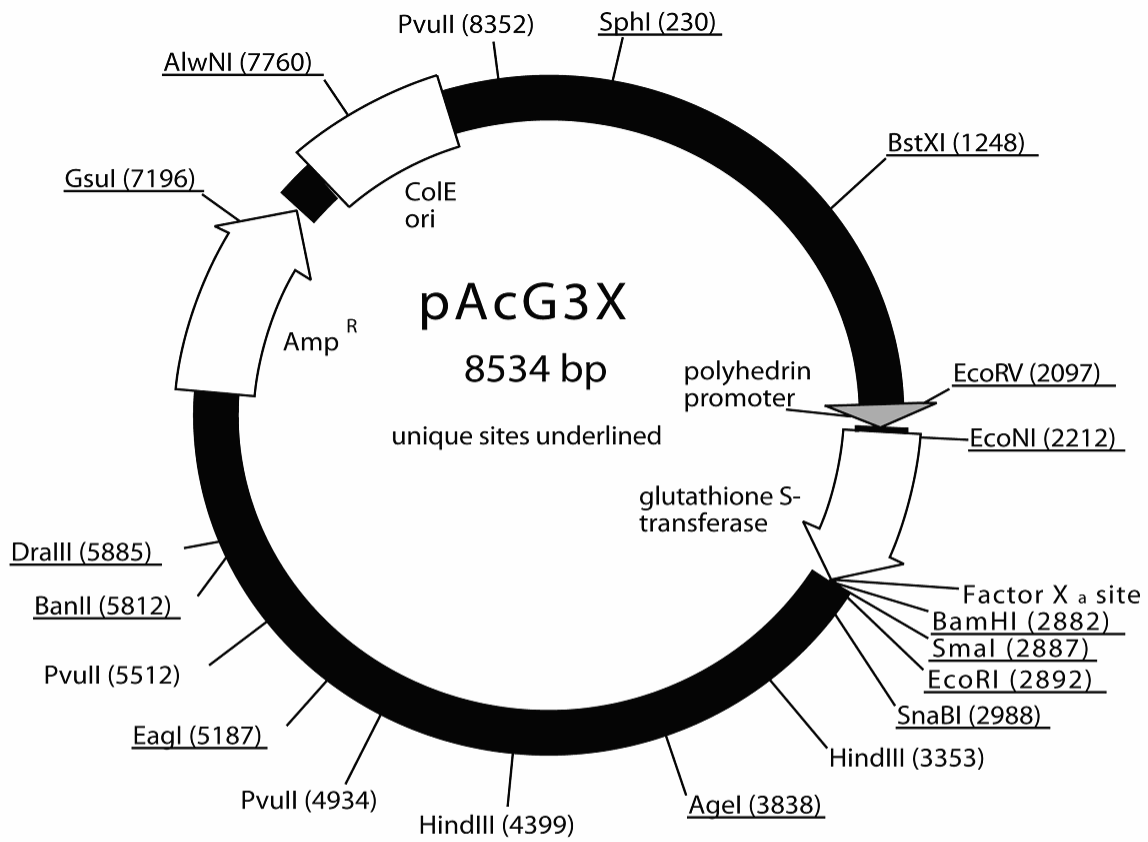
For country-specific contact information, visit bdbiosciences.com/how_to_order/

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. ©2008 BD





References

- Davies AH, Jowett JB, Jones IM. Recombinant baculovirus vectors expressing glutathione-S-transferase fusion proteins. *Biotechnology*. 1993; 11(8):933-936. (Biology)
- Livingstone C, Jones I. Baculovirus expression vectors with single strand capability. *Nucleic Acids Res*. 1989; 17(6):2366. (Biology)