

## Technical Data Sheet

**pAcUW51 Baculovirus Transfer Vector****Product Information**

**Material Number:** 554747  
**Size:** 5 µg in 50 µl

**Description**

This vector is an *Autographa californica* (AcNPV) polyhedrin locus-based vector that contains a copy of the AcNPV p10 promoter and SV40 transcription termination signals inserted in tandem, upstream of the AcNPV polyhedrin gene promoter, but in opposite orientation. This facilitates the insertion of one foreign gene coding region at a BamH I site, under the control of the polyhedrin promoter and a second one at a Bgl II or EcoR I site, under the control of the p10 gene promoter. Recombinant viruses will thus express two foreign proteins. The insert of choice must provide its own ATG start signal at the 5' end of the gene. The distance between the cloning site and the ATG start of the gene should not exceed 100 nucleotides, otherwise, protein expression will be poor. The transfer vector contains the F1 ori for production of single stranded DNA. This vector is best used in conjunction with BD BaculoGold™ DNA (Cat. No. 554739) or baculovirus DNA.

**Preparation and Storage**

Store undiluted at -20°C.

The pAcUW51 plasmid DNA has been prepared using a silicon bead matrix and dissolved in TE buffer (10 mM Tris-HCl pH 7.5; 1 mM EDTA).

**Application Notes****Recommended Assay Procedure:**

Insert your gene of interest into the BamH I site to express it under the polyhedrin promoter control or into the Bgl II or EcoR I site to express it under p10 promoter control. (see plasmid map below) 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 further cloning information refer to the attached restriction map. Perform a co-transfection of the purified recombinant plasmid and linearized baculovirus DNA (BD BaculoGold™ viral DNA Cat No. 554739, recommended) using a susceptible insect cell line (e.g., Sf9 or Sf21) and identify recombinant viruses expressing your protein. For detailed procedures refer to the online protocols or 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**

Catalog Number	Name	Size	Clone
554739	Linearized Baculovirus DNA	5 transfections	(none)
560129	Transfection Kit	5 transfections	(none)
554763	Sf9 Insect Cells (Live) in TNM-FH	>10 <sup>7</sup> cells	(none)
554762	Sf9 Insect Cells (Frozen)	>10 <sup>7</sup> cells	(none)

**Product Notices**

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

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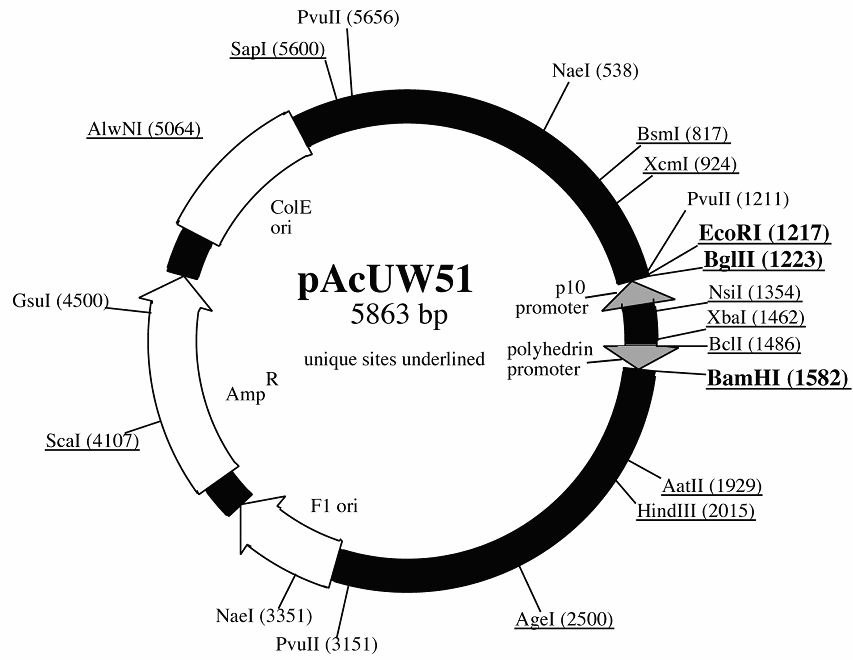
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## References

Sambrook J, Fritsch E, Maniatis T. *Molecular Cloning, 2nd Edition*. Cold Spring Harbor, New York: Cold Spring Harbor Laboratory Press; 1989.(Biology)