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## Data Sheet

### pLSG-IBA144

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<b>Description</b>	<b>StarGate Acceptor Vector for high-level expression of target proteins in insect cells. The gene transfer into the polyhedrin gene locus of AcMNPV DNA is achieved by homologous recombination and the vector carries a polyhedrin promoter. Co-transfection with BacPAK6 linearized AcMNPV DNA (Clontech) or with circular flashBAC modified AcMNPV DNA (Oxford Expression Technologies) allows the generation of recombinant baculovirus at very high efficiency through reconstitution of an essential gene (ORF 1629) and elimination of wild-type virus to great extent. The expressed recombinant protein will be secreted into the medium.</b>
<b>Affinity tag</b>	Twin-Strep-tag® is fused to the N-terminus and 6xHisidine-tag is fused to the C-terminus of the recombinant protein.
<b>Secretion</b>	BM40 secretory signal peptide is encoded for the transfer of the expressed protein into the medium. During the translocation the signal peptide is removed by endogenous proteases.
<b>Cloning Strategy</b>	Cloning into StarGate Acceptor Vectors has to be done with the restriction enzyme Esp3I. There is no Multiple Cloning Site (MCS) available that can be used for the integration of the gene of interest instead (see manual).
<b>Resistance</b>	Ampicillin: for selection of transformed <i>E. coli</i> cells
<b>Form</b>	5 µg, dissolved in 20 µl TE buffer, pH 8.0: 10 mM Tris/HCl, 1 mM EDTA
<b>Concentration</b>	250 ng/µl
<b>Stability</b>	12 months after shipping
<b>Storage</b>	recommended: 2-8 °C for frequent usage, -20 °C for long-term storage
<b>Shipping</b>	room temperature
<b>Hazards</b>	Product is not classified as hazardous according to (EC) No 1272/2008 [CLP]. A Material Safety Data Sheet is provided.

#### For research use only

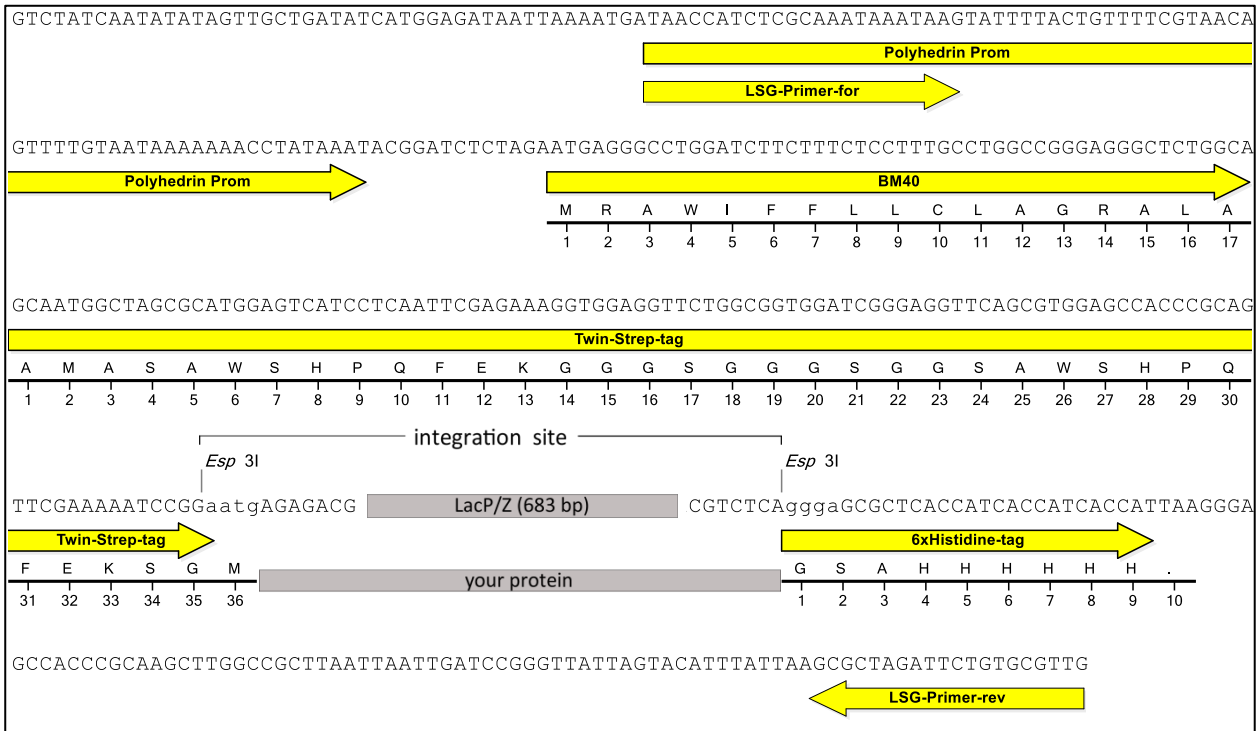
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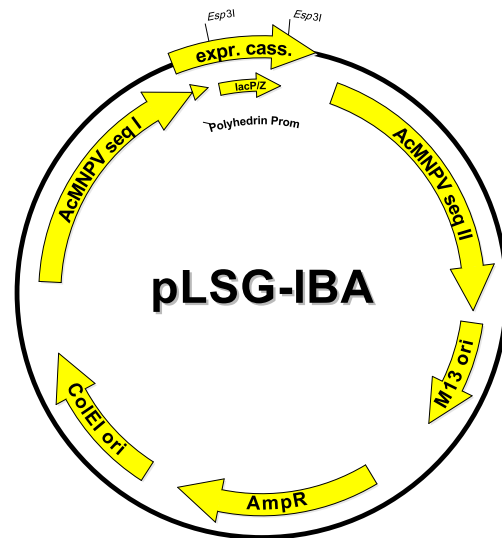
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## Expression cassette of pLSG-IBA144



LacP/Z cassette = contains LacZ alpha fragment under control of a separate promoter, which allows alpha complementation of *LacZ* mutations such as *LacZ*Δ*M15* as in *E. coli* DH5α or TOP10.

your protein = after StarGate cloning using *Esp31* your gene of interest will be located here



Features	from bp	to bp	Sequencing primer
AcMNPVseq II	1	1395	LSG-Primer-for
M13 ori	1447	1920	
Ampicillin resistance gene	2251	3111	5' - TAACCATCTCGCAAATAAATAAG -3'
ColEI ori	3259	3902	LSG-Primer-rev
AcMNPVseq I	4211	5357	
Polyhedrin promoter	5286	5355	5' - CAACGCACAGAATCTAGCGC -3'
forward primer binding site	5286	5308	
BM40 signal sequence	5369	5419	
Twin-Strep-tag®	5420	5524	
LacZ alpha fragment	5753	6154	
6xHistidine-tag	6218	6244	
reverse primer binding site	6310	6329	
total vector length		6329	