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Data Sheet

pLSG-IBA142

Cat. No.: 5-4942-001

Version: 3.0
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Description	**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.**
Affinity tag	Twin-Strep-tag® is fused to the C-terminus and 6xHsitidine-tag is fused to the N-terminus of the recombinant protein.
Secretion	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.
Cloning Strategy	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).
Resistance	Ampicillin: for selection of transformed *E. coli* cells
Form	5 µg, dissolved in 20 µl TE buffer, pH 8.0: 10 mM Tris/HCl, 1 mM EDTA
Concentration	250 ng/µl
Stability	12 months after shipping
Storage	recommended: 2-8 °C for frequent usage, -20 °C for long-term storage
Shipping	room temperature
Hazards	Product is not classified as hazardous according to (EC) No 1272/2008 [CLP]. A Material Safety Data Sheet is provided.

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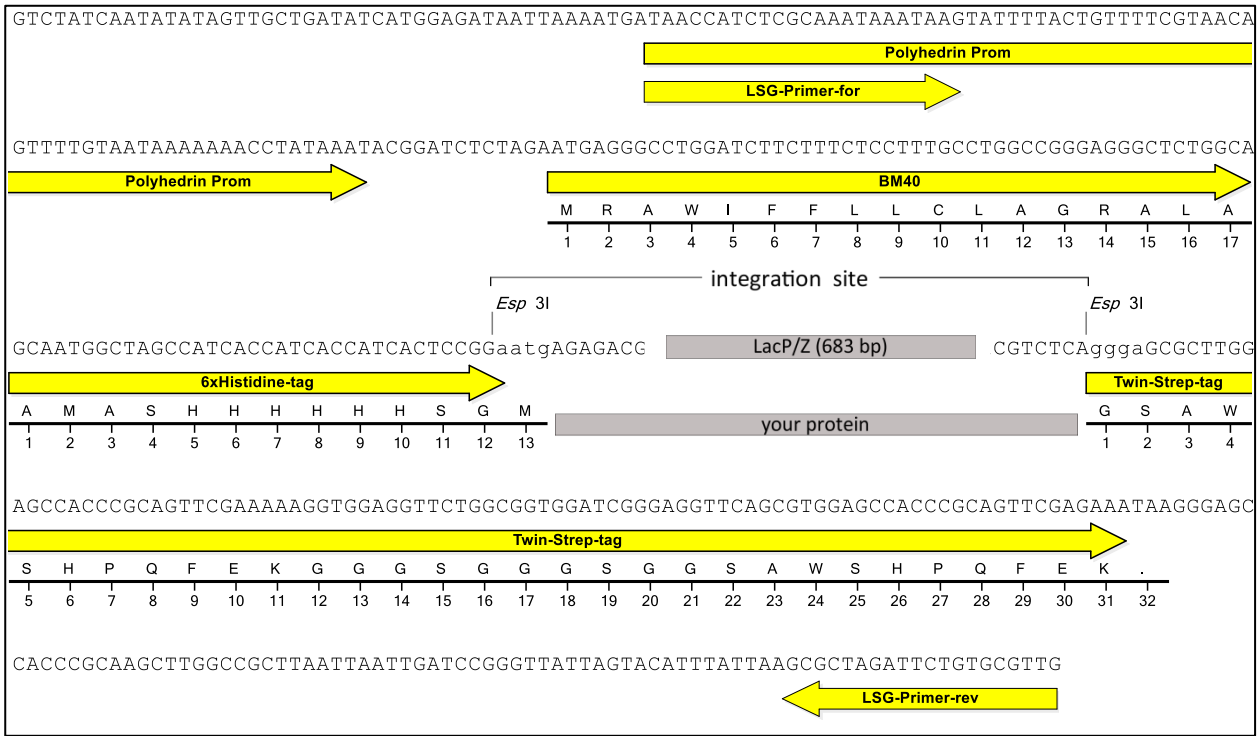
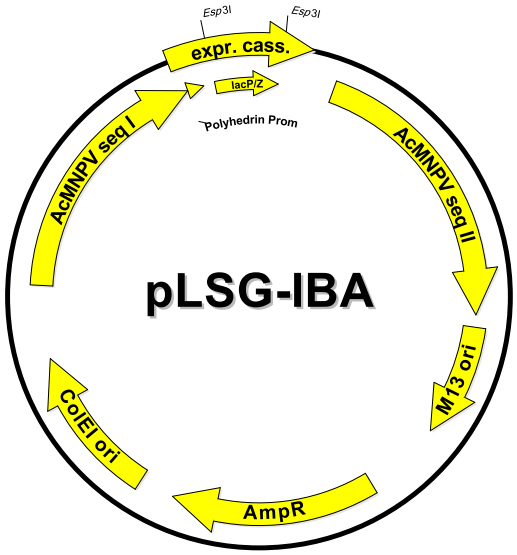
Expression cassette of pLSG-IBA142





LacP/Z cassette = contains LacZ alpha fragment under control of a separate promoter, which allows alpha complementation of *LacZ* mutations such as *LacZΔM15* as in *E. coli* DH5α or TOP10.

your protein = after StarGate cloning using *Esp3*I 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	
AcMNPVseq I	4211	5357	**LSG-Primer-rev**
Polyhedrin promoter	5286	5355	
forward primer binding site	5286	5308	5′- CAACGCACAGAATCTAGCGC -3′
BM40 signal sequence	5369	5419	
6xHistidine-tag	5420	5455	
LacZ alpha fragment	5684	6085	
Twin-Strep-tag®	6149	6241	
reverse primer binding site	6307	6326	
total vector length		6326	