IBA Lifesciences GmbH
Rudolf-Wissell-Str. 28
37079 Goettingen
Germany
Tel.: +49 (0) 551-5 06 72-0
E-mail: info@iba-lifesciences.com
www.iba-lifesciences.com

Data Sheet

pLSG-IBA123

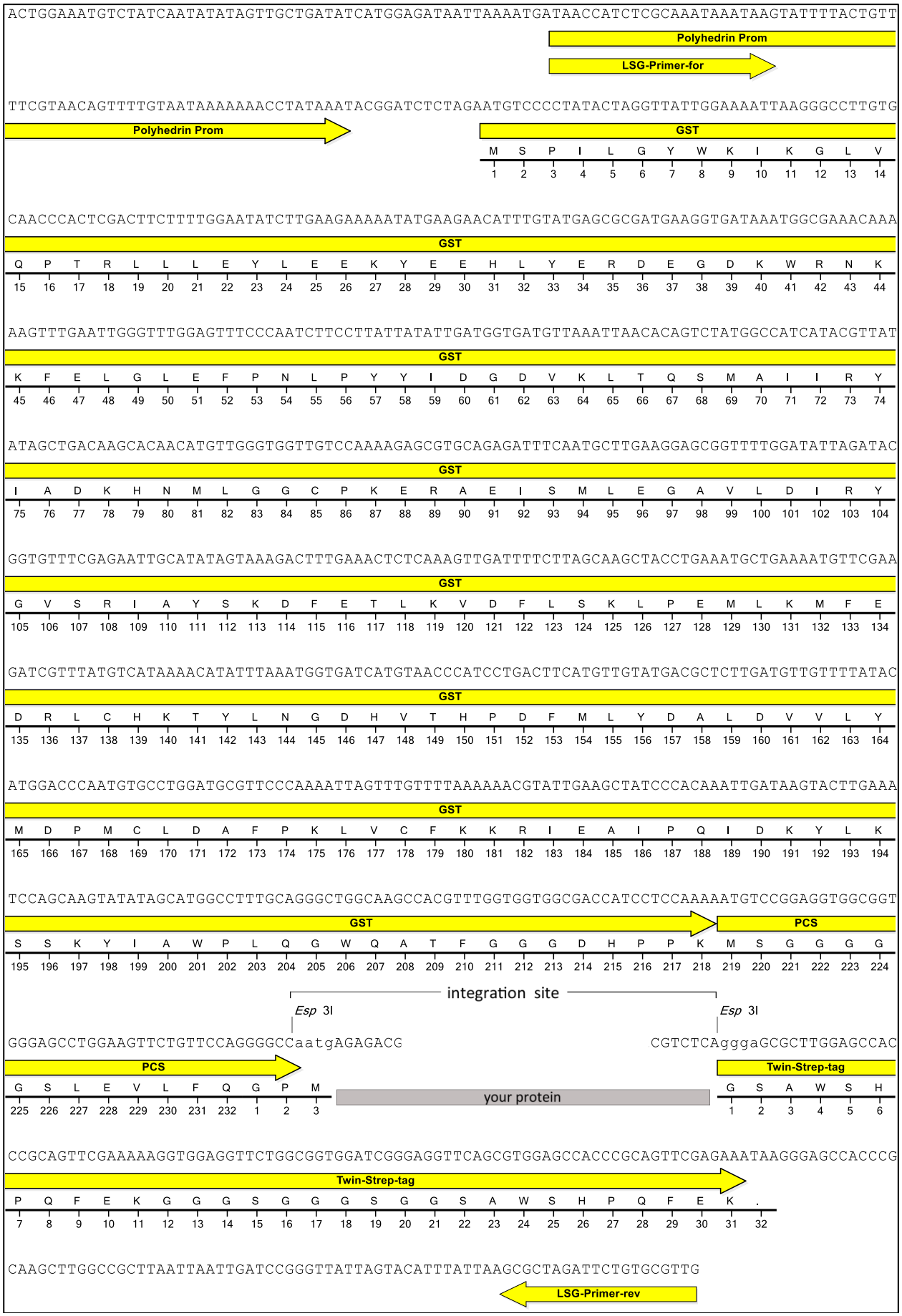
Cat. No.: 5-4923-001

Version: 3.0
Revision Date: 27.07.2021

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 localized in the cytoplasm.**
Affinity tag	Twin-Strep-tag®II is fused to the C-terminus and GST-tag is fused to the N-terminus of the recombinant protein. GST-tag can be removed by digesting with PreScission™ Protease.
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.

For research use only

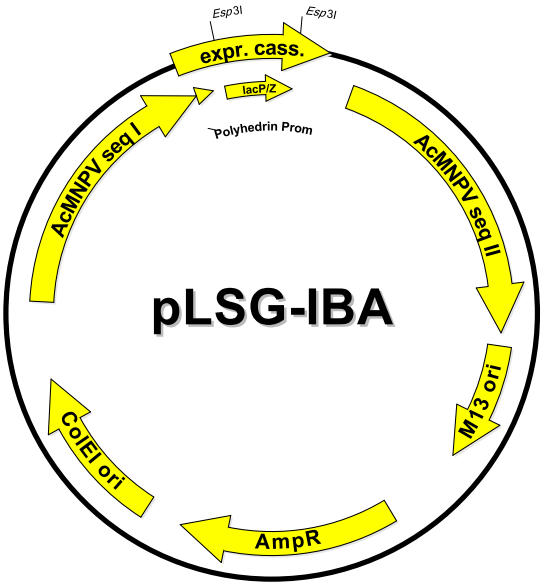
Expression cassette of pLSG-IBA123



Expression cassette of pLSG-IBA123, continued

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′
GST-tag	5369	6070	
LacZ alpha fragment	6299	6700	
Twin-Strep-tag®	6764	6856	
reverse primer binding site	6922	6941	
total vector length		6941	