



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

## Data Sheet

### pLSG-IBA123

Cat. No.: 5-4923-001

Version: 3.0  
Revision Date: 27.07.2021

|                         |   |
|-------------------------|---|
| <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 localized in the cytoplasm.</b> |
| <b>Affinity tag</b>     | 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.   |
| <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].<br>A Material Safety Data Sheet is provided.   |

#### For research use only

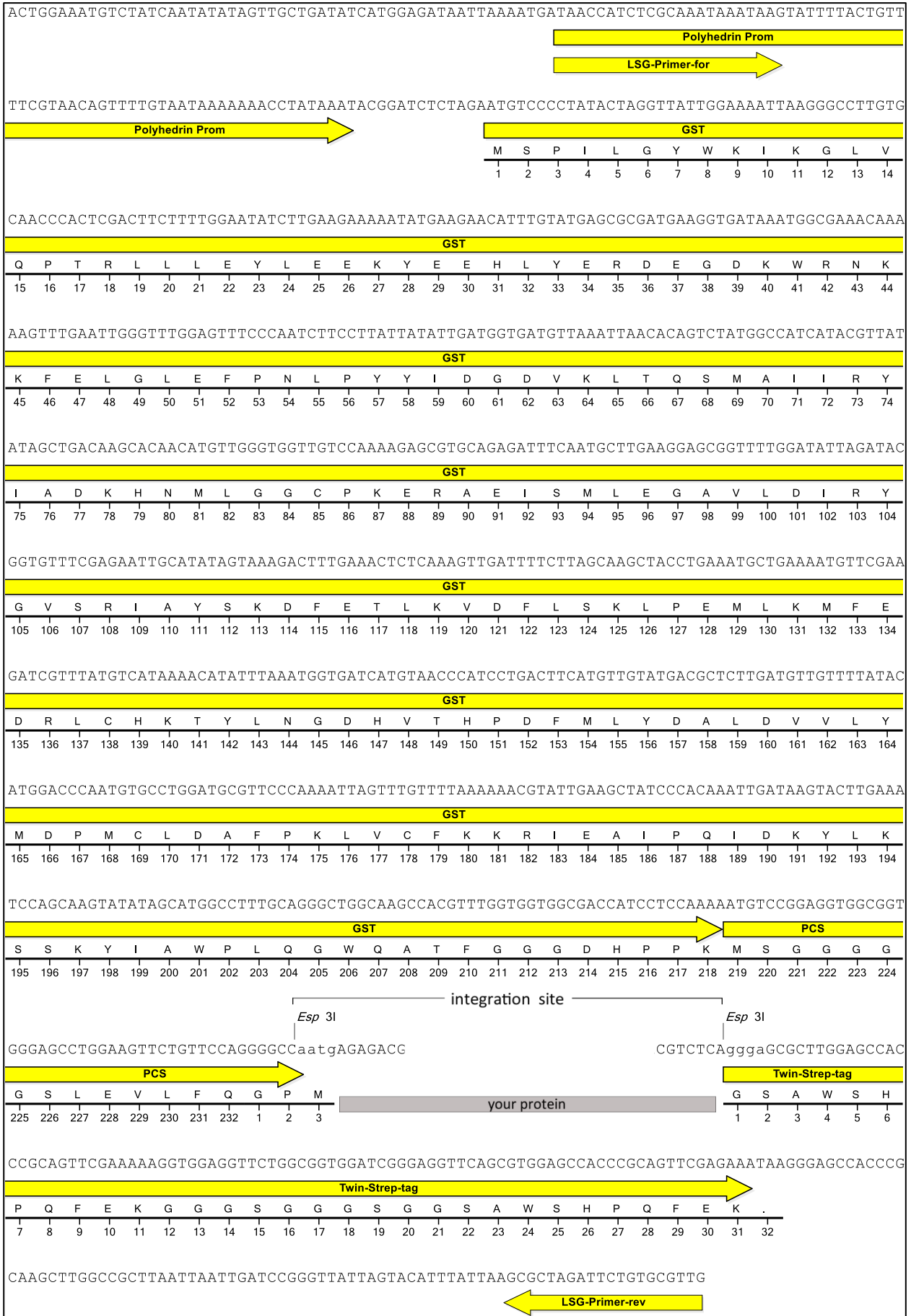
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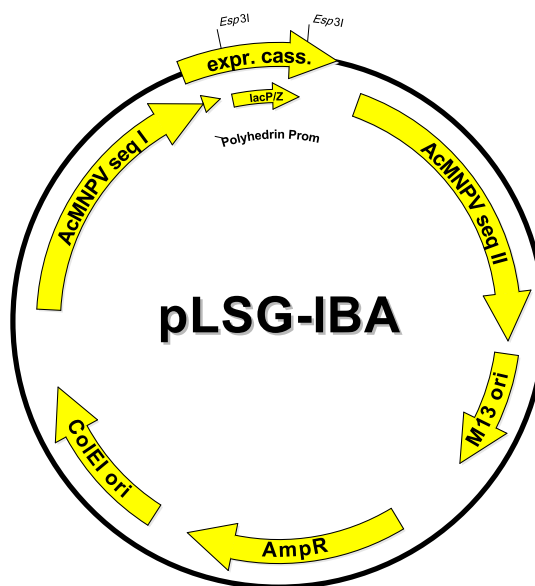
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# Expression cassette of pLSG-IBA123



## 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 *Esp3I* your gene of interest will be located here



| Features                    | from bp | to bp | Sequencing primer   |
|-----------------------------|---------|-------|---|
| AcMNPVseq II                | 1       | 1395  | <b>LSG-Primer-for</b><br>5' - TAACCATCTCGCAAATAAATAAG -3' |
| M13 ori                     | 1447    | 1920  |   |
| Ampicillin resistance gene  | 2251    | 3111  |   |
| ColEI ori                   | 3259    | 3902  |   |
| AcMNPVseq I                 | 4211    | 5357  | <b>LSG-Primer-rev</b><br>5' - CAACGCACAGAATCTAGCGC -3'    |
| Polyhedrin promoter         | 5286    | 5355  |   |
| forward primer binding site | 5286    | 5308  |   |
| GST-tag                     | 5369    | 6070  |   |
| LacZ alpha fragment         | 6299    | 6700  |   |
| Twin-Strep-tag®             | 6764    | 6856  |   |
| reverse primer binding site | 6922    | 6941  |   |
| total vector length         |         | 6941  |   |