

## Data Sheet

### pASG-IBA105

Cat. No.: 5-4105-001

Version: 2.3

Lot No.: 4105-

Revision Date: 03.03.2020

<b>Description</b>	StarGate Acceptor Vector for bacterial expression. <ul style="list-style-type: none"> <li>The expression cassette is under transcriptional control of the tetracycline promoter/operator.</li> <li>Compatible with any <i>E. coli</i> strain. The <i>tet</i>-promoter works independently from the genetic background of <i>E. coli</i>.</li> <li>The expressed recombinant protein will be localized in the cytoplasm.</li> </ul>
<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>Bacterial Expression</b>	Expression is induced upon addition of 200 µg anhydrotetracycline (# 2-0401-001; -002) per 1 liter <i>E. coli</i> shaking culture ( $A_{550} = 0.5$ ).
<b>Affinity tag</b>	Strep-Tactin® affinity tag (Twin-Strep-tag®) for purification of recombinant protein via Strep-Tactin resin. The Twin-Strep-tag is fused to the N-terminus of the recombinant protein.
<b>Resistance</b>	Ampicillin
<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.

**Note:** The sequences have been compiled from information in the sequence database, published literature, and other sources, together with partial sequences obtained by IBA, however, the vectors have not been completely sequenced.



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#### For research use only

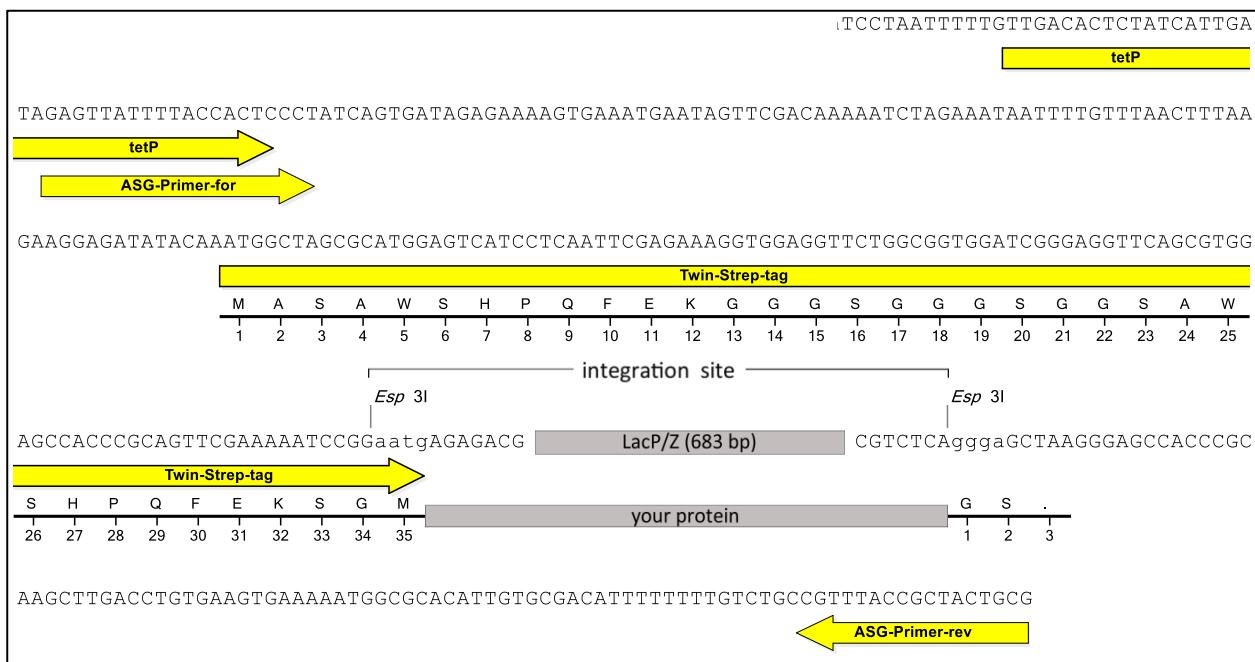
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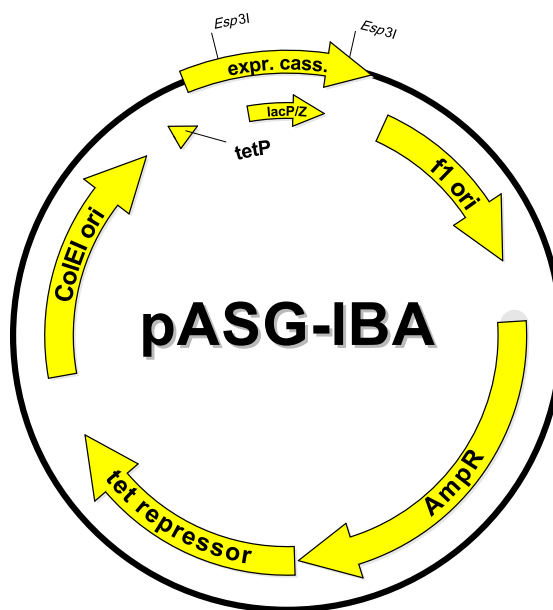
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## Expression cassette of pASG-IBA105



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
f1 origin	13	451	<b>ASG-Primer-for (Cat. No. 5-0000-101)</b> 5' - GAGTTATTTTACCACTCCCT -3'
AmpR resistance gene	600	1460	
Tet-repressor	1470	2093	<b>ASG-Primer-rev (Cat. No. 5-0000-102)</b> 5' - CGCAGTAGCGGTAAACG -3'
ColE1ori	2246	2834	
Tet promoter	2939	2975	
forward primer binding site	2959	2978	
Twin-Strep-tag	3062	3166	
LacZ alpha fragment	3392	3793	
reverse primer binding site	3936	3952	
total vector length		3952	