

## Data Sheet

### pASG-IBA143

Cat. No.: 5-4143-001

Version: 2.3

Lot No.: 4143-

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>	The recombinant protein will contain two affinity tags: <ol style="list-style-type: none"> <li>Strep-Tactin affinity tag (Twin-Strep-tag) for purification of recombinant protein via Strep-Tactin resin. The Twin-Strep-tag is fused to the C-terminus of the recombinant protein.</li> <li>6xHistidine-tag for the purification of recombinant protein via Ni-NTA resins. The 6xHistidine-tag is fused to the N-terminus of the recombinant protein.</li> </ol>
<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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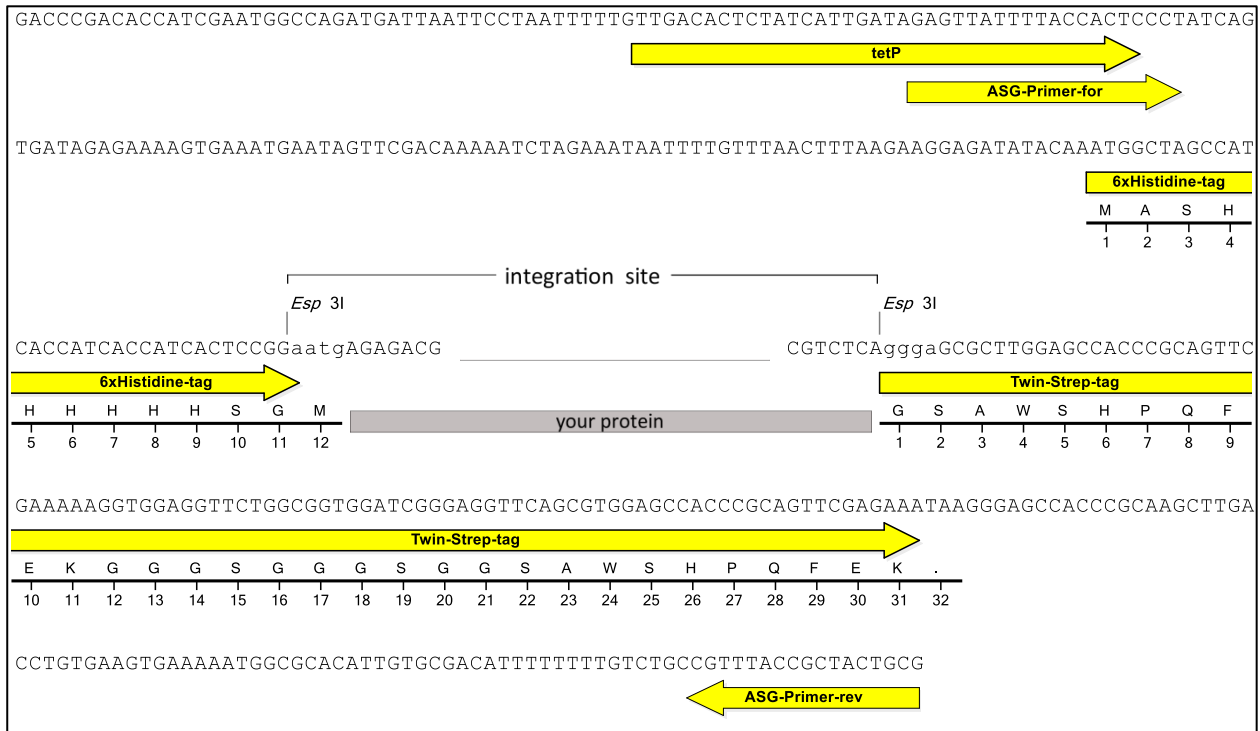
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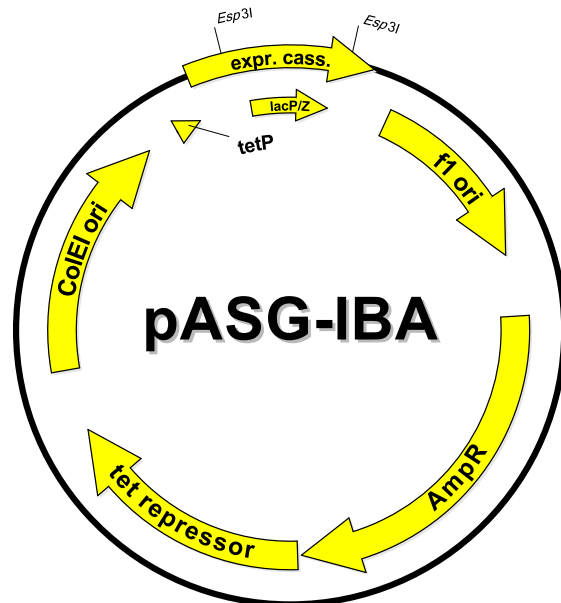
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## Expression cassette of pASG-IBA143



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	ASG-Primer-for (Cat. No. 5-0000-101) 5' - GAGTTATTTTACCACTCCCT -3'
AmpR resistance gene	600	1460	
Tet-repressor	1470	2093	
ColEI ori	2246	2834	ASG-Primer-rev (Cat. No. 5-0000-102) 5' - CGCAGTAGCGGTAAACG -3'
Tet promoter	2939	2975	
forward primer binding site	2959	2978	
6xHistidine-tag	3062	3094	
LacZ alpha fragment	3323	3724	
Twin-Strep-tag	3788	3880	
reverse primer binding site	3954	3970	
total vector length		3970	