

## Data Sheet

### pASG-IBA164

Cat. No.: 5-4164-001

Version: 2.3

Lot No.: 4164-

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 (order no.: 2-0401-001; 2-0401-002) 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 N-terminus of the recombinant protein.</li> <li>FLAG-tag for the purification of recombinant protein via anti-FLAG M2 agarose resins. The FLAG-tag is fused to the C-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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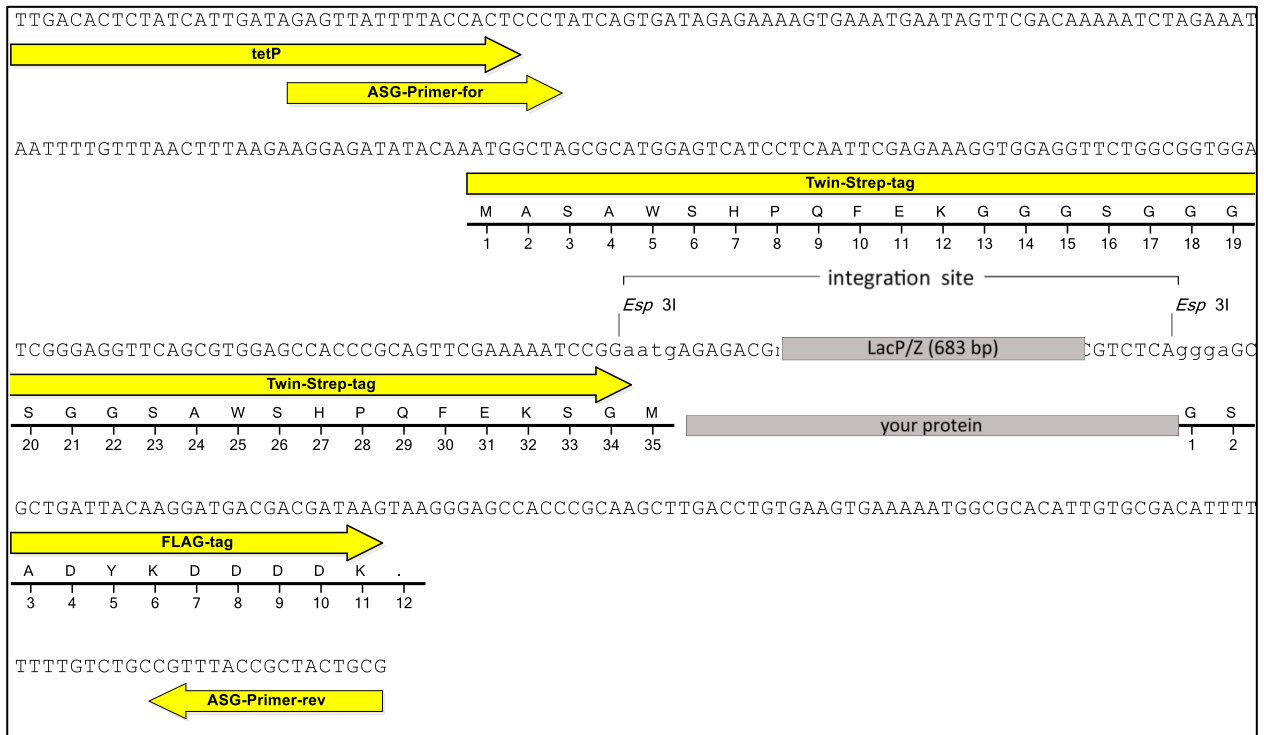
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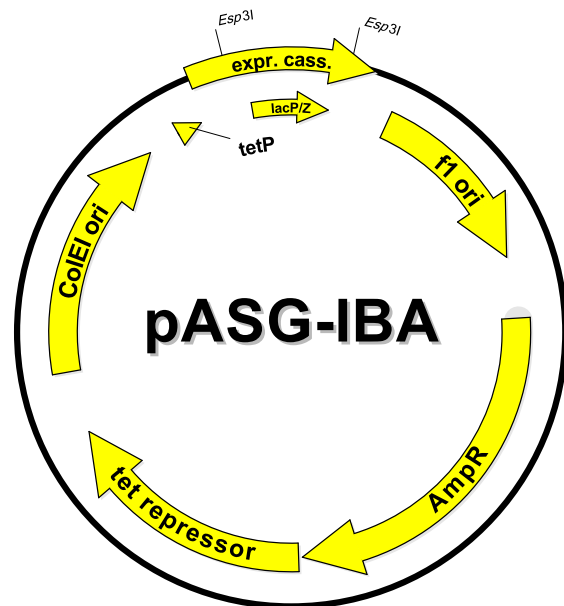
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## Expression cassette of pASG-IBA164



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>
AmpR resistance gene	600	1460	
Tet-repressor	1470	2093	5' - GAGTTATTTTACCACCTCCCT -3'
ColEI ori	2246	2834	
Tet promoter	2939	2975	
forward primer binding site	2959	2978	<b>ASG-Primer-rev (Cat. No. 5-0000-102)</b>
Twin-Strep-tag	3062	3163	5' - CGCAGTAGCGGTAAACG -3'
LacZ alpha fragment	3392	3793	
FLAG-tag	3863	3889	
reverse primer binding site	3963	3979	
total vector length		3979	