

#### **IBA Lifesciences GmbH**

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## **Data Sheet**

# pASG-IBA45

Cat. No.: 5-4045-001

Version: 3.0

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Description	StarGate Acceptor Vector for bacterial expression. The expression cassette is under transcriptional control of the tetracycline promoter/operator. The expressed recombinant protein will be localized in the cytoplasm.			
Affinity tag	Strep-tag® II is fused to the N-terminus and 6xHis-tag is fused to the C-terminus of the recombinant protein.			
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).			
Expression strain	Any <i>E. coli</i> strain. The <i>tet</i> -promoter works independently from the genetic background of <i>E. coli</i> .			
Bacterial Expression	Expression is induced upon addition of 200 $\mu$ g anhydrotetracycline per 1 liter <i>E. coli</i> shaking culture (A <sub>550</sub> = 0.5).			
Resistance	Ampicillin			
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

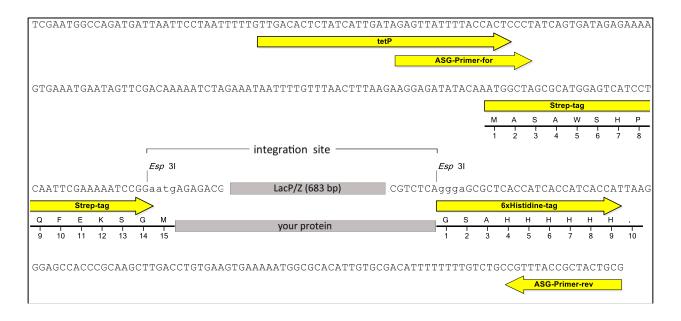
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### **Expression cassette of pASG-IBA45**



LacP/Z cassette = contains LacZ alpha fragment under control of a separate promoter, which allows alpha complementation of LacZ mutations such as  $LacZ\Delta M15$  as in *E. coli* DH5 $\alpha$  or TOP10.

your protein =

after StarGate cloning using Esp3l your gene of interest will be located here

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Features	from bp	to bp	Sequencing primer
f1 origin	13	451	ASG-Primer-for
AmpR resistance gene	600	1460	
Tet-repressor	1470	2093	5'- GAGTTATTTTACCACTCCCT -3'
ColEI ori	2246	2834	
Tet promoter	2939	2975	ASG-Primer-rev
forward primer binding site	2959	2978	ASG-Primer-rev
Strep-tag®II	3062	3103	5'- CGCAGTAGCGGTAAACG -3'
LacZ alpha fragment	3332	3733	
6xHistidine-tag	3797	3823	
reverse primer binding site	3897	3913	
total vector length		3913	