IBA Headquarters
IBA GmbH
Rudolf-Wissell-Str. 28
37079 Goettingen
Germany
Tel. +49 (0) 551-5 06 72-0
Fax +49 (0) 551-5 06 72-181

IBA US contact information
Fax 1-888-531-6813

E-mail: info@iba-lifesciences.com
http://www.iba-lifesciences.com

Data Sheet

pASG-IBA164

Cat. No.: 5-4164-001
Lot No.: 4164-

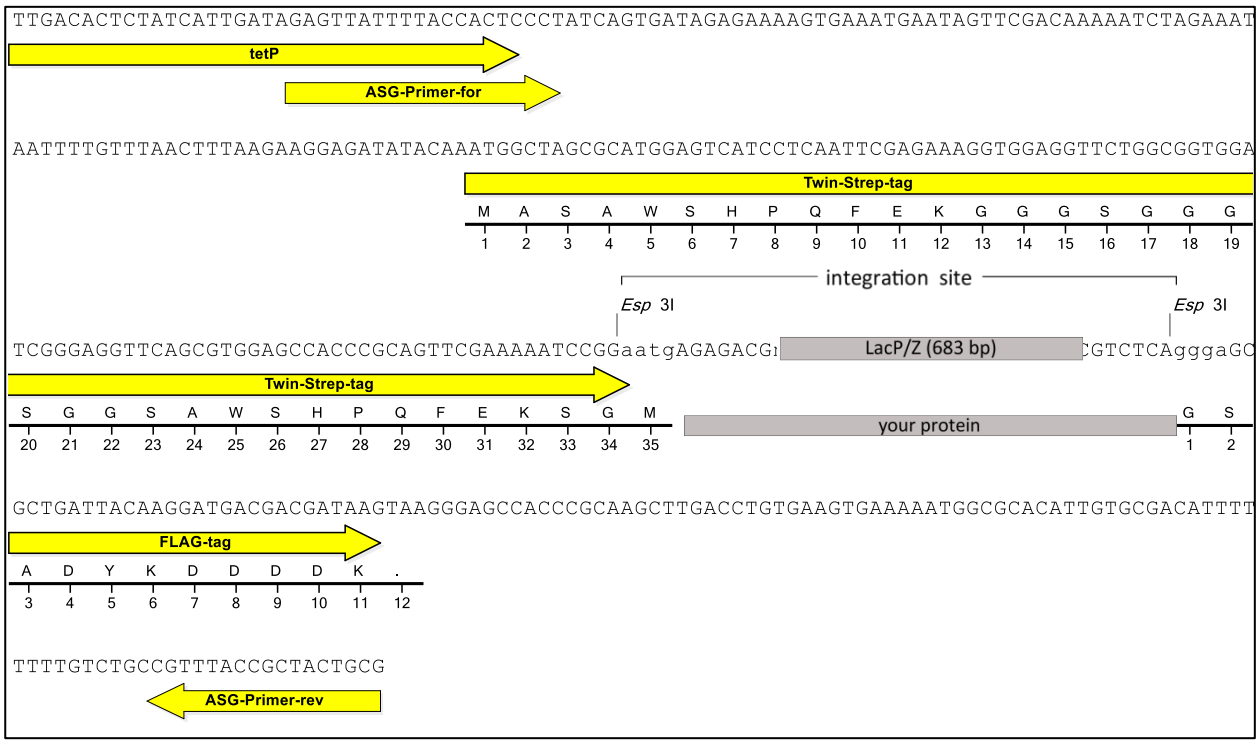
Version: 2.3
Revision Date: 03.03.2020

Description	StarGate Acceptor Vector for bacterial expression. • The expression cassette is under transcriptional control of the tetracycline promoter/operator. • Compatible with any *E. coli* strain. The *tet*-promoter works independently from the genetic background of *E. coli*. • The expressed recombinant protein will be localized in the cytoplasm.
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).
Bacterial Expression	Expression is induced upon addition of 200 µg anhydrotetracycline (order no.: 2-0401-001; 2-0401-002) per 1 liter *E. coli* shaking culture (A_{550} = 0.5).
Affinity tag	The recombinant protein will contain two affinity tags: 1. 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. 2. 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.
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.

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.

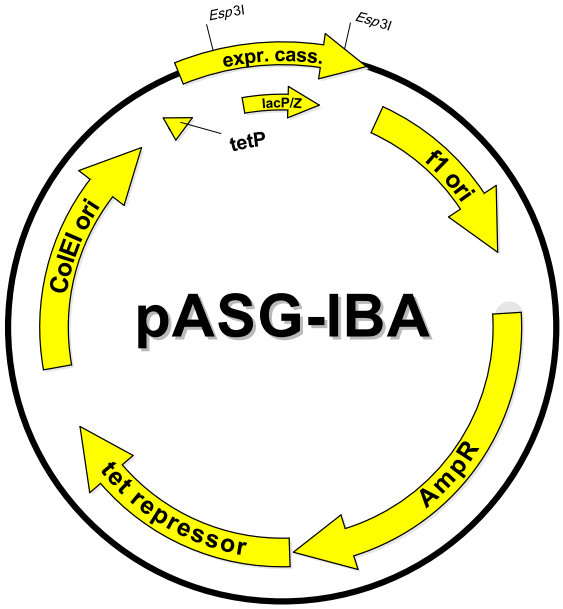
For research use only

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 *Esp3*I 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)**
AmpR resistance gene	600	1460	
Tet-repressor	1470	2093	5′- GAGTTATTTTACCACTCCCT -3′
ColEIori	2246	2834	
Tet promoter	2939	2975	
forward primer binding site	2959	2978	**ASG-Primer-rev (Cat. No. 5-0000-102)**
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	