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Data Sheet

pASG-IBA2

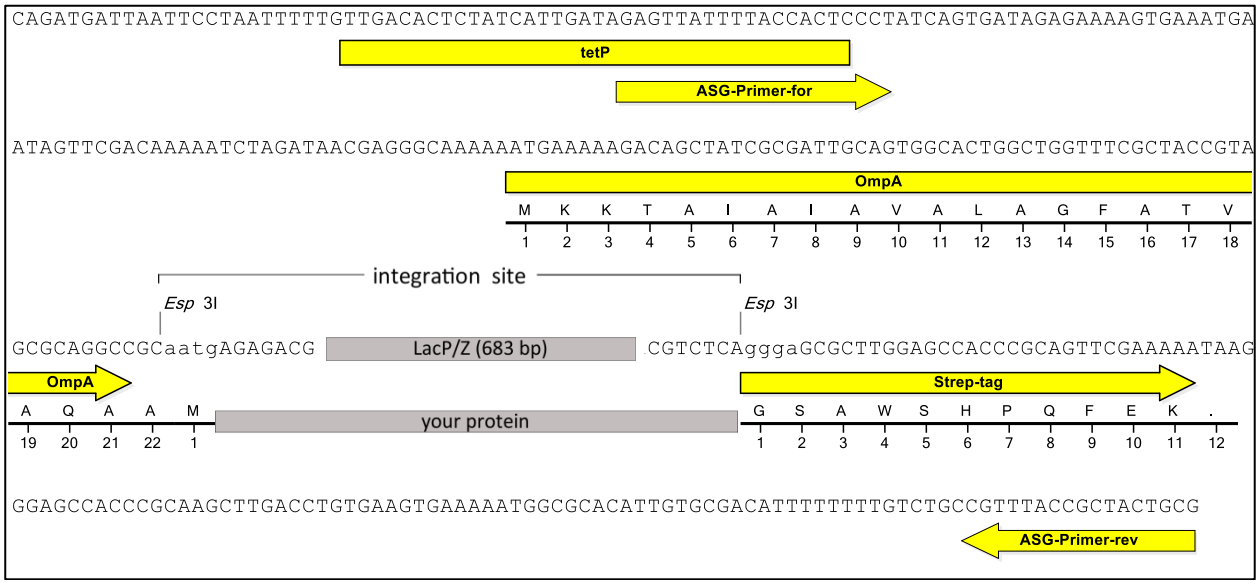
Cat. No.: 5-4002-001

Version: 3.0
Revision Date: 16.06.2021

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 secreted into the periplasm.**
Affinity tag	Strep-tag® II is fused to the C-terminus of the recombinant protein.
Secretion	The *ompA* signal sequence directs the expressed protein into the periplasmic space and will be cleaved off during the translocation process
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 *E. coli* strain. The *tet*-promoter works independently from the genetic background of *E. coli*.
Bacterial Expression	Expression is induced upon addition of 200 µg anhydrotetracycline per 1 liter *E. coli* shaking culture (A_{550} = 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.

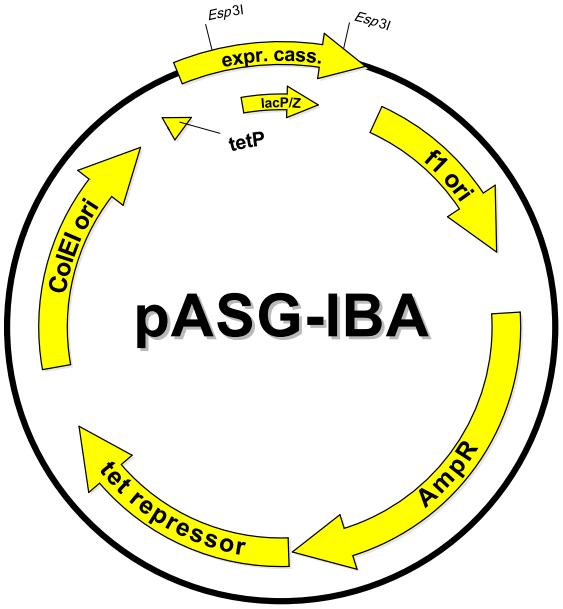
For research use only

Expression cassette of pASG-IBA2



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.

yourprotein = after StarGate cloning using *Esp3*I your gene of interest will be located here



Features	from bp	to bp	Recommended Sequencing primer
f1 origin	13	451	**ASG-Primer-for**
AmpR resistance gene	600	1460	5′- GAGTTATTTTACCACTCCCT -3′
Tet-repressor	1470	2093	
ColEI ori	2246	2834	
Tet promoter	2939	2975	**ASG-Primer-rev**
forward primer binding site	2959	2978	
OmpA signal sequence	3041	3103	5′- CGCAGTAGCGGTAAACG -3′
LacZ alpha fragment	3335	3736	
Strep-tagII	3800	3832	
reverse primer binding site	3906	3922	
total vector length		3922	