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# Data Sheet

# pASG-IBA104

Cat. No.: 5-4104-001
Lot No.: 4104-

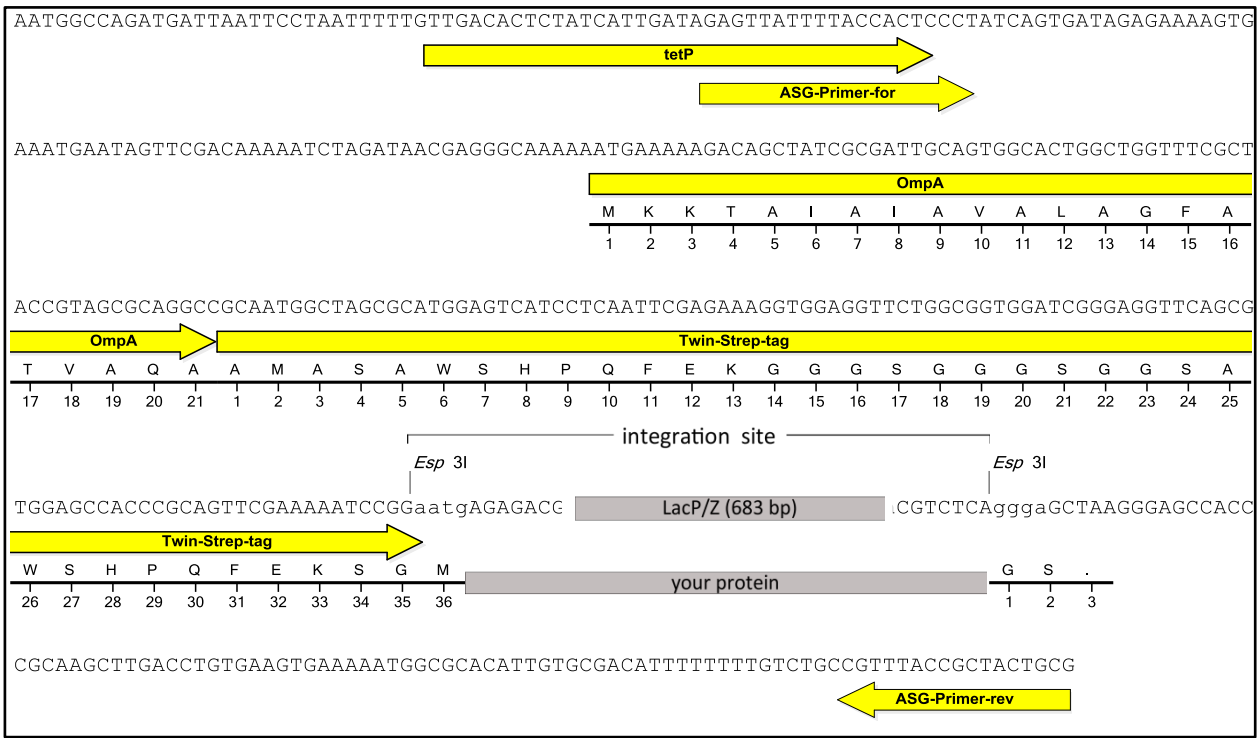
Version: 2.0
Revision Date: 15.02.2016

| | |
|---|---|
| **Description** | StarGate Acceptor Vector for bacterial expression.<br>• The expression cassette is under transcriptional control of the tetracycline promoter/operator.<br>• Compatible with any *E. coli* strain. The *tet*-promoter works independently from the genetic background of *E. coli*.<br>• The expressed recombinant protein will be secreted into the periplasm. |
| **Bacterial Expression** | Expression is induced upon addition of 200 µg anhydrotetracycline (# 2-0401-001; -002) per 1 liter*E. coli* shaking culture ($A_{550}$ = 0.5). |
| **Affinity tag** | *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. |
| **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].<br>A Material Safety Data Sheet is provided. |

**Note:** Vector sequences can be downloaded from http://www.iba-lifesciences.com/technical-support.html. 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.

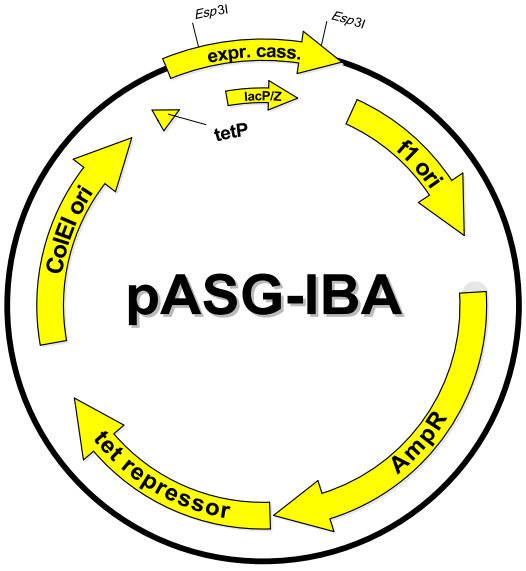
## For research use only

## Expression cassette of pASG-IBA104




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 *Esp*3I 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)** |
| OmpA signal sequence | 3041 | 3103 | 5′- CGCAGTAGCGGTAAACG -3′ |
| Twin-Strep-tag | 3104 | 3208 | |
| LacZ alpha fragment | 3437 | 3838 | |
| reverse primer binding site | 3981 | 3997 | |
| total vector length | | 3997 | |