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## Data Sheet

### pASG-IBA102

Cat. No.: 5-4102-001

Version: 3.0  
Revision Date: 26.07.2021

|                             |  |
|-----------------------------|--|
| <b>Description</b>          | <b>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.</b> |
| <b>Affinity tag</b>         | Twin-Strep-tag® is fused to the C-terminus of the recombinant protein.   |
| <b>Secretion</b>            | The <i>ompA</i> signal sequence directs the expressed protein into the periplasmic space and will be cleaved off during the translocation process  |
| <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>Expression strain</b>    | Any <i>E. coli</i> strain. The <i>tet</i> -promoter works independently from the genetic background of <i>E. coli</i> .  |
| <b>Bacterial Expression</b> | Expression is induced upon addition of 200 µg anhydrotetracycline per 1 liter <i>E. coli</i> shaking culture ( $A_{550} = 0.5$ ).  |
| <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].<br>A Material Safety Data Sheet is provided.  |

#### For research use only

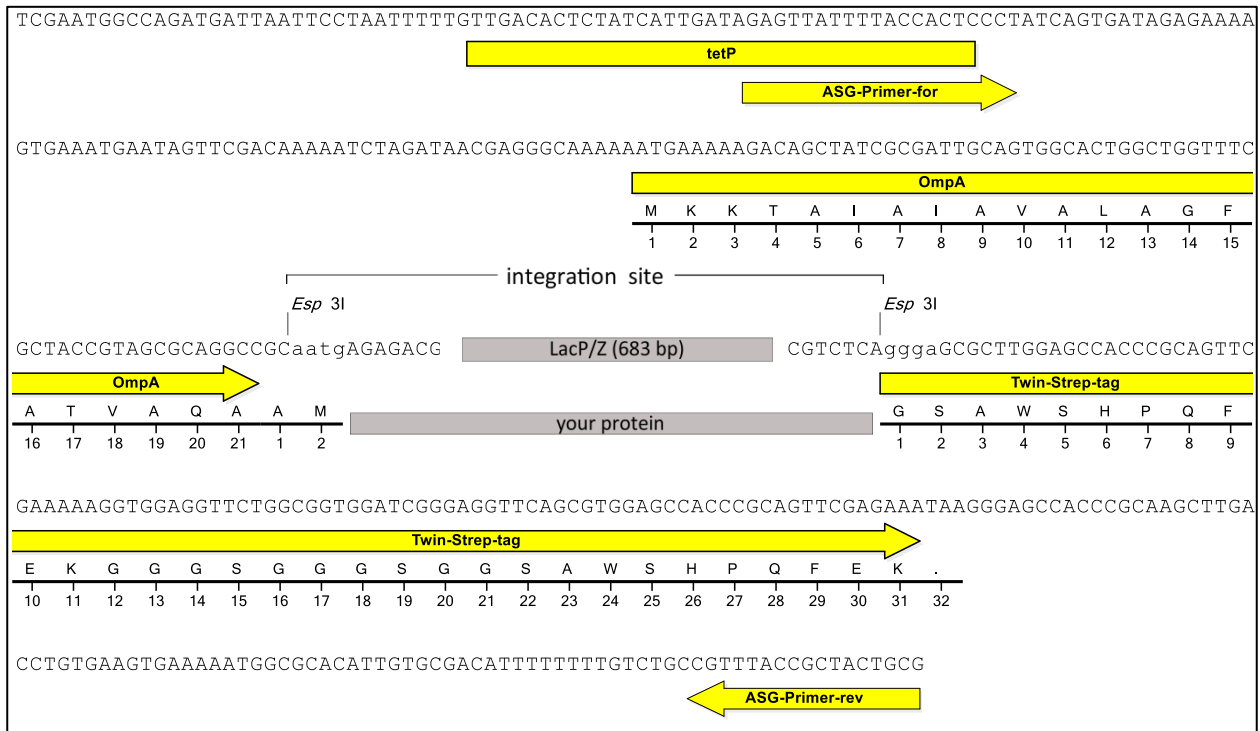
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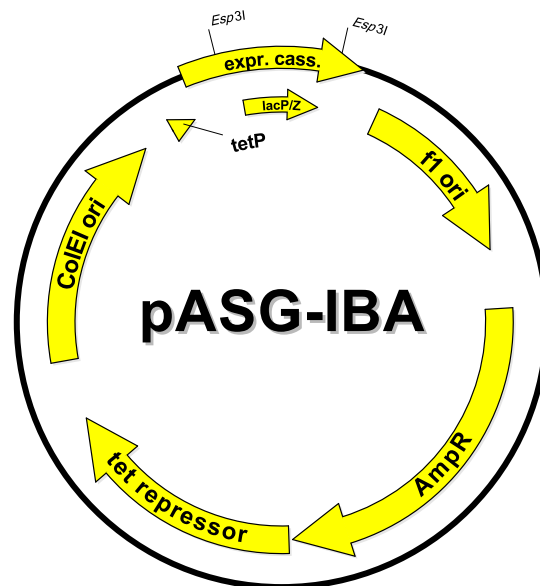
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## Expression cassette of pASG-IBA102



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 *Esp31* your gene of interest will be located here



| 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  | ASG-Primer-rev                |
| Tet promoter                | 2939    | 2975  |                               |
| forward primer binding site | 2959    | 2978  | 5' - CGCAGTAGCGGTAAACG -3'    |
| OmpA signal sequence        | 3041    | 3103  |                               |
| LacZ alpha fragment         | 3335    | 3736  |                               |
| Twin-Strep-tag®             | 3800    | 3892  |                               |
| reverse primer binding site | 3966    | 3982  |                               |
| total vector length         |         | 3982  |                               |