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# **Data Sheet**

## pESG-IBA43

Cat. No.: 5-4443-001

Version: 3.0 Revision Date: 27.07.2021

| Description      | StarGate Acceptor Vector for stable and non-replicative transient expression in mammalian cells. It carries the human cytomegalovirus (CMV) immediate-early promoter for high-level expression and the SV40 ori for episomal replication in cell lines that are latently infected with SV40 or that express the SV40 large T antigen (e.g., HEK293T, COS-1, COS-7). The expressed recombinant protein will be localized in the cytoplasm. |  |  |
|------------------|---|--|--|
| Affinity tag     | Strep-tag <sup>®</sup> II is fused to the C-terminus and 6xHistidine-tag is fused to the N-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).   |  |  |
| Resistance       | Ampicillin: for selection of transformed <i>E. coli</i> cells<br>Neomycin: for selection of stable cell lines   |  |  |
| 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.   |  |  |

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### **Expression cassette of pESG-IBA43**





 LacP/Z cassette =
 contains LacZ alpha fragment under control of a separate promoter, which allows alpha complementation of LacZ mutations such as LacZAM15 as in E. coli DH5a or TOP10.

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

| Features                    | from bp | to bp | Sequencing primer             |
|-----------------------------|---------|-------|-------------------------------|
| f1 origin                   | 259     | 687   | ESG-Primer-for                |
| SV40 ori                    | 692     | 1035  |                               |
| Neomycin resistance gene    | 1097    | 1891  | 5'- GAGAACCCACTGCTTACTGGC -3' |
| ColEl ori                   | 2637    | 3222  |                               |
| Ampicillin resistance gene  | 3393    | 4253  | ESG-Primer-rev                |
| CMV promoter                | 4621    | 5208  | LSG-FTIMEF-TEV                |
| forward primer binding site | 5221    | 5241  | 5'- TAGAAGGCACAGTCGAGG -3'    |
| 6xHistidine-tag             | 5284    | 5316  |                               |
| LacZ alpha fragment         | 5545    | 5946  |                               |
| Strep-tag <sup>®</sup> II   | 6010    | 6042  |                               |
| reverse primer binding site | 6104    | 6121  |                               |
| polyA signal sequence       | 1       | 213   |                               |
| total vector length         |         | 6121  |                               |