

## Data Sheet

### pESG-IBA142

Cat. No.: 5-4542-001

Version: 2.2

Lot No.: 4542-

Revision Date: 04.03.2020

<b>Description</b>	StarGate® Acceptor Vector designed for high-level stable and non-replicative transient expression in most mammalian hosts containing the following elements: <ul style="list-style-type: none"> <li>• Human cytomegalovirus (CMV) immediate-early promoter for high-level expression in a wide range of mammalian cells</li> <li>• Neomycin resistance gene for selection of stable cell lines</li> <li>• Episomal replication in cell lines that are latently infected with SV40 or that express the SV40 large T antigen (e.g. COS-1, COS-7)</li> <li>• The expressed recombinant protein will be secreted into the medium.</li> </ul>
<b>Affinity tag</b>	The recombinant protein will contain two affinity tags: <ol style="list-style-type: none"> <li>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 C-terminus of the recombinant protein.</li> <li>2. 6xHistidine-tag for the purification of recombinant protein via Ni-NTA resins. The 6xHistidine-tag is fused to the N-terminus of the recombinant protein.</li> </ol>
<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]. 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.



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#### For research use only

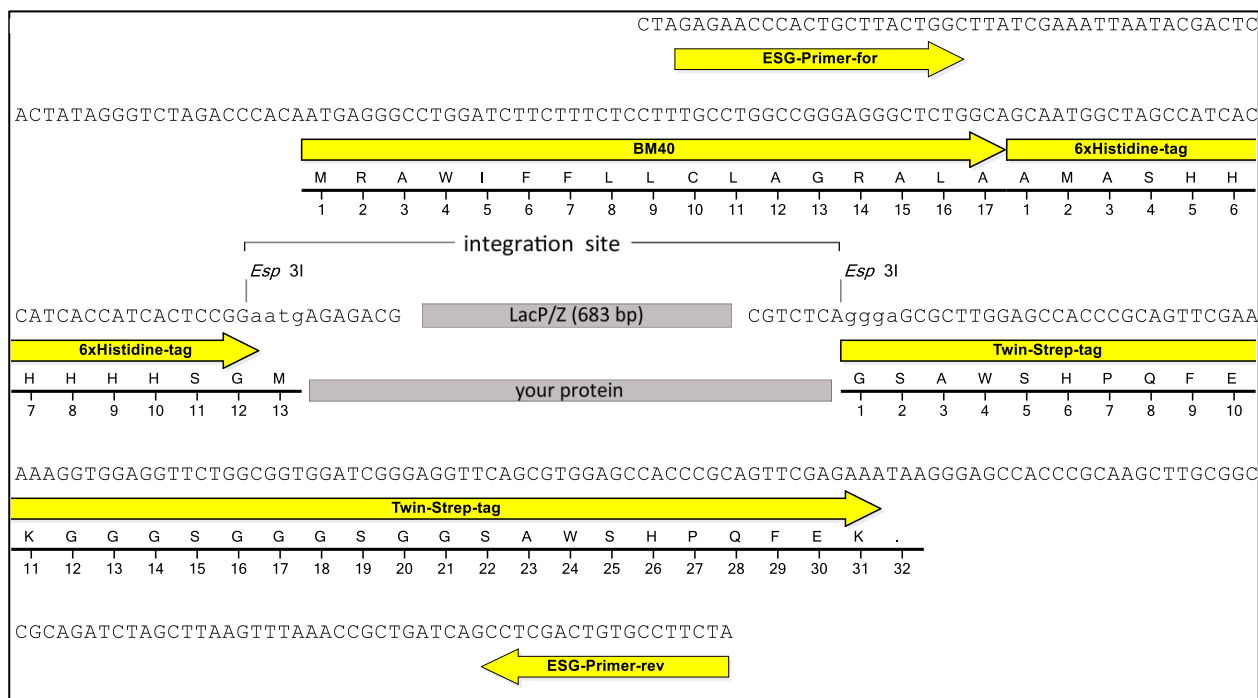
##### Important licensing information

This product is based on StarGate, One-STrEP-tag, 6xHistidine-tag and CMV promoter technologies covered by intellectual property (IP) rights and on completion of the sale IBA grants respective Limited Use Label Licenses to purchaser. IP rights and Limited Use Label Licenses for said technology are further described and identified at <http://www.iba-lifesciences.com/patents.html> or upon inquiry at [info@iba-lifesciences.com](mailto:info@iba-lifesciences.com) or at IBA GmbH, Rudolf-Wissell-Str. 28, 37079 Goettingen, Germany. By use of this product the purchaser accepts the terms and conditions of all applicable Limited Use Label Licenses.

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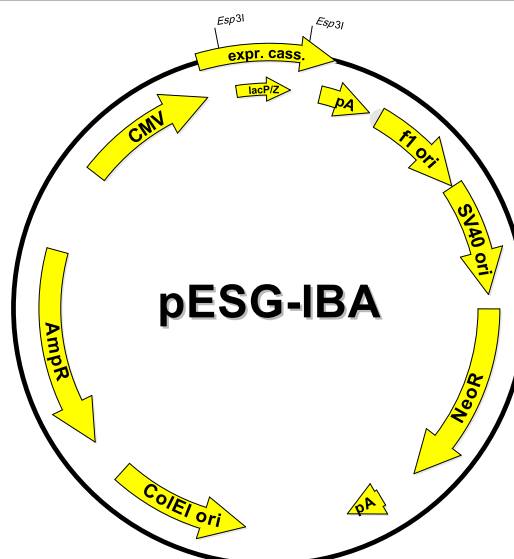
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## Expression cassette of pESG-IBA142



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	259	687	ESG-Primer-for (Cat. No. 5-0000-121)
SV40 ori	692	1035	
Neomycin resistance gene	1097	1891	5' - GAGAACCCACTGCTTACTGGC -3'
ColEI ori	2637	3222	ESG-Primer-rev (Cat. No. 5-0000-122)
Ampicillin resistance gene	3393	4253	
CMV promoter	4621	5208	5' - TAGAAGGCACAGTCGAGG -3'
forward primer binding site	5221	5241	
BM40 signal sequence	5284	5334	
6xHistidine-tag	5335	5370	
LacZ alpha fragment	5599	6000	
Twin-Strep-tag	6064	6156	
reverse primer binding site	6218	6235	
polyA signal sequence	1	213	
total vector length		6235	