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## Data Sheet

### pESG-IBA104

Cat. No.: 5-4504-001

Version: 3.0  
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<b>Description</b>	<b>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 medium.</b>
<b>Affinity tag</b>	Twin-Strep-tag <sup>®</sup> is fused to the N-terminus of the recombinant protein.
<b>Secretion</b>	BM40 secretory signal peptide is encoded for the transfer of the expressed protein into the medium. During the translocation the signal peptide is removed by endogenous proteases.
<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>Resistance</b>	Ampicillin: for selection of transformed <i>E. coli</i> cells Neomycin: for selection of stable cell lines
<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.

#### For research use only

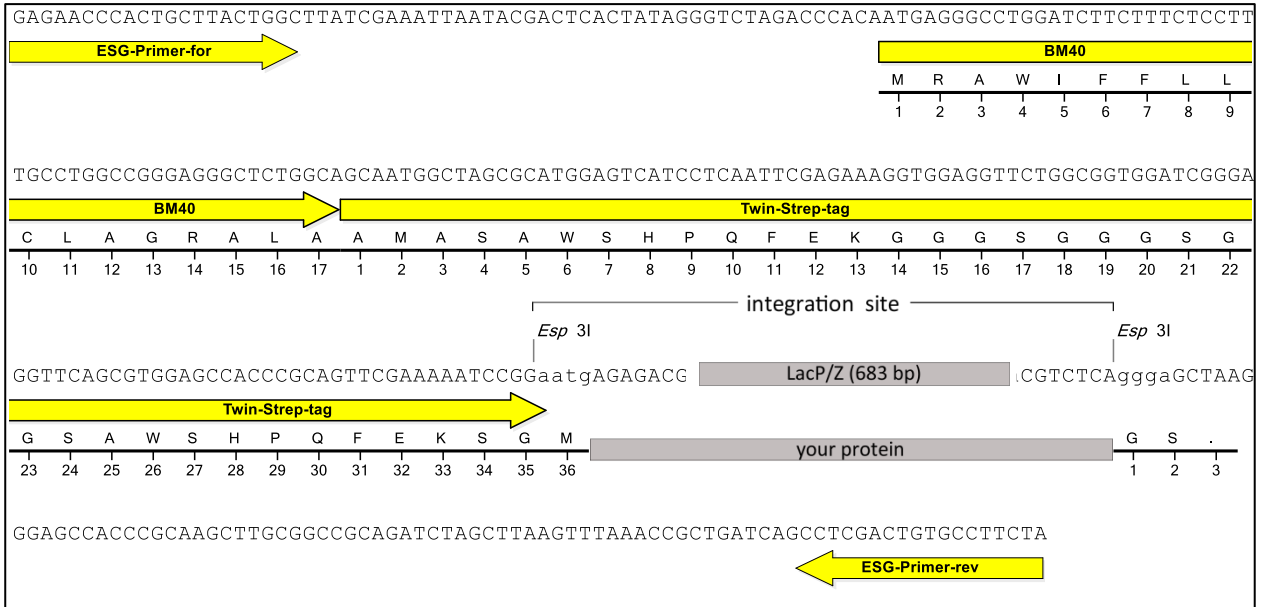
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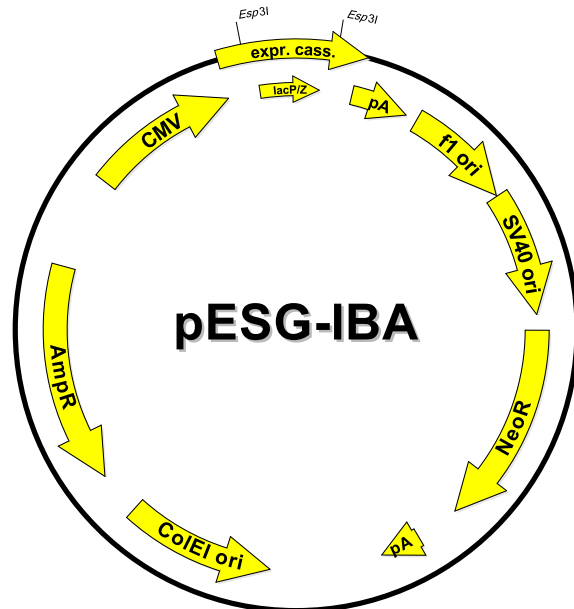
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## Expression cassette of pESG-IBA104



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 *Esp31* your gene of interest will be located here



Features	from bp	to bp	Sequencing primer
f1 origin	259	687	ESG-Primer-for 5' - GAGAACCCACTGCTTACTGGC -3'
SV40 ori	692	1035	
Neomycin resistance gene	1097	1891	ESG-Primer-rev 5' - TAGAAGGCACAGTCGAGG -3'
ColEI ori	2637	3222	
Ampicillin resistance gene	3393	4253	
CMV promoter	4621	5208	
forward primer binding site	5221	5241	
BM40 signal sequence	5284	5334	
Twin-Strep-tag®	5335	5439	
LacZ alpha fragment	5668	6069	
reverse primer binding site	6200	6217	
polyA signal sequence	1	213	
total vector length		6217	