

# **Data Sheet**

# pESG-IBA45

Cat. No.: 5-4445-001

Lot No.: 4445-

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Description	StarGate® Acceptor Vector designed for high-level stable and non-replicative transient expression in most mammalian hosts containing the following elements:  • Human cytomegalovirus (CMV) immediate-early promoter for high-level expression in a wide range of mammalian cells  • Neomycin resistance gene for selection of stable cell lines  • 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)  • The expressed recombinant protein will be localized in the cytoplasm.			
Affinity tag	<ol> <li>The recombinant protein will contain two affinity tags:         <ol> <li>Strep-Tactin affinity tag (Strep-tag® II) for the purification of recombinant protein via Strep-Tactin resins. The Strep-tagII is fused to the N-terminus of the recombinant protein.</li> <li>6xHistidine-tag for the purification of recombinant protein via Ni-NTA resins. The 6xHistidine-tag is fused to the C-terminus of the recombinant protein.</li> </ol> </li> </ol>			
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].  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

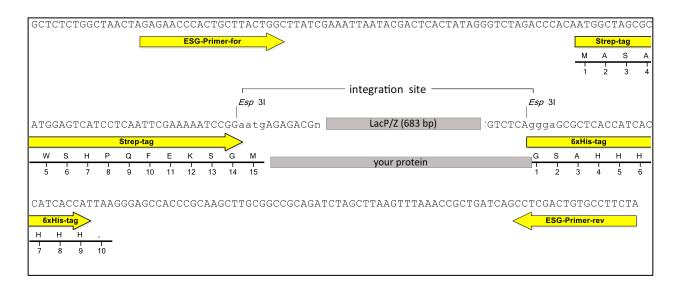
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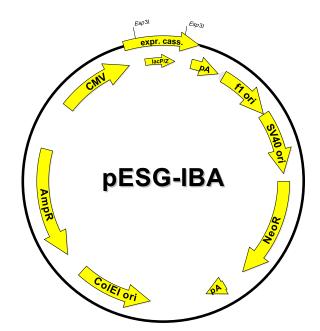
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## **Expression cassette of pESG-IBA45**



LacP/Z cassette = contains LacZ alpha fragment under control of a separate promoter, which allows alpha complementation of *LacZ* mutations such as  $LacZ\Delta M15$  as in *E. coli* DH5 $\alpha$  or TOP10.

after StarGate cloning using *Esp3*l your gene of interest will be located here your protein =



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'
ColElori	2637	3222	
Ampicillin resistance gene	3393	4253	ESG-Primer-rev (Cat. No. 5-0000-122)
CMV promoter	4621	5208	
forward primer binding site	5221	5241	5'- TAGAAGGCACAGTCGAGG -3'
Strep-tagII	5284	5325	
LacZ alpha fragment	5554	5955	
6xHistidine-tag	6019	6045	
reverse primer binding site	6107	6124	
polyA signal sequence	1	213	
total vector length		6124	