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Data Sheet

pESG-IBA104

Cat. No.: 5-4504-001

Version: 3.0
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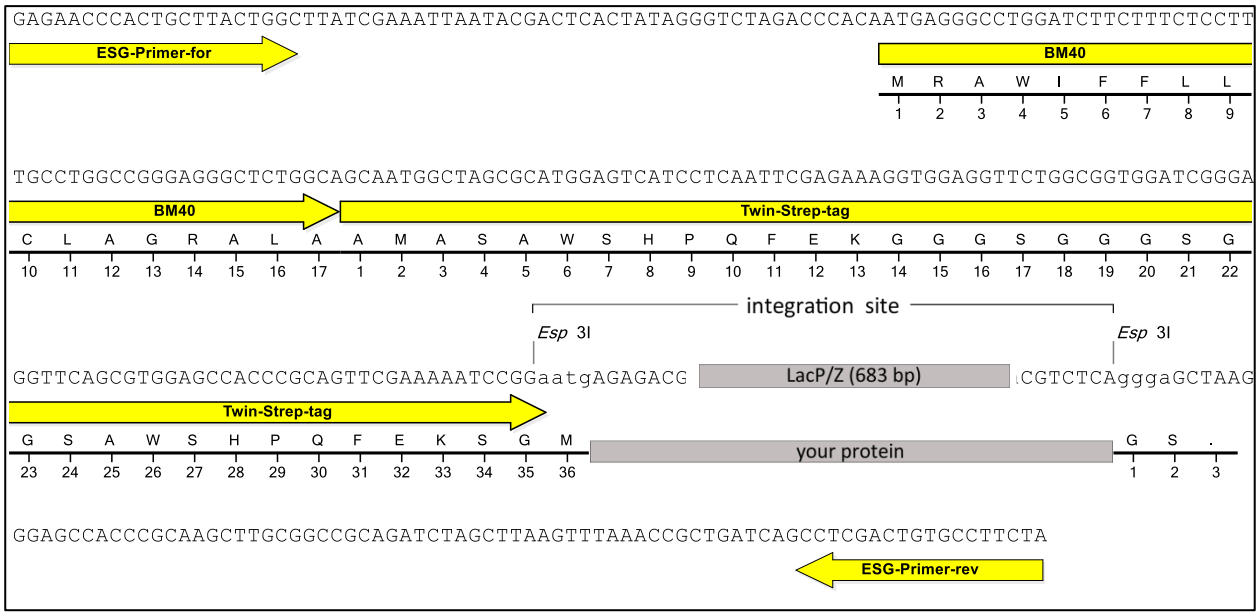
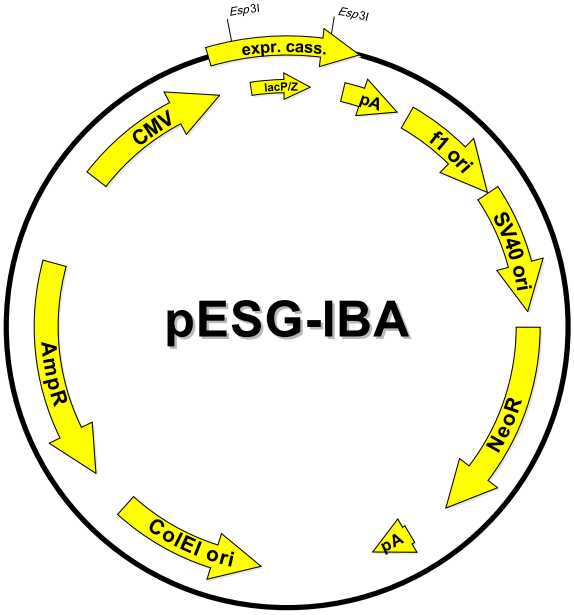
Description	**StarGate Acceptor Vector for stable and non-replicative transient expression in mammalian cells. It carries the human cytomegalovirus (CMV) immediate-early promoter for high-level expression and the SV40 ori for episomal replication in cell lines that are latently infected with SV40 or that express the SV40 large T antigen (e.g., HEK293T, COS-1, COS-7). The expressed recombinant protein will be localized in the medium.**
Affinity tag	Twin-Strep-tag® is fused to the N-terminus of the recombinant protein.
Secretion	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.
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 *E. coli* cells 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]. A Material Safety Data Sheet is provided.

For research use only

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 *Esp3*I 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'
ColEI ori	2637	3222	
Ampicillin resistance gene	3393	4253	**ESG-Primer-rev**
CMV promoter	4621	5208	
forward primer binding site	5221	5241	5'- TAGAAGGCACAGTCGAGG -3'
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	