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Data Sheet

pESG-IBA23

Cat. No.: 5-4423-001

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® II is fused to the C-terminus and GST-tag is fused to the N-terminus of the recombinant protein. GST-tag can be removed by digesting with PreScission™ Protease.		
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 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

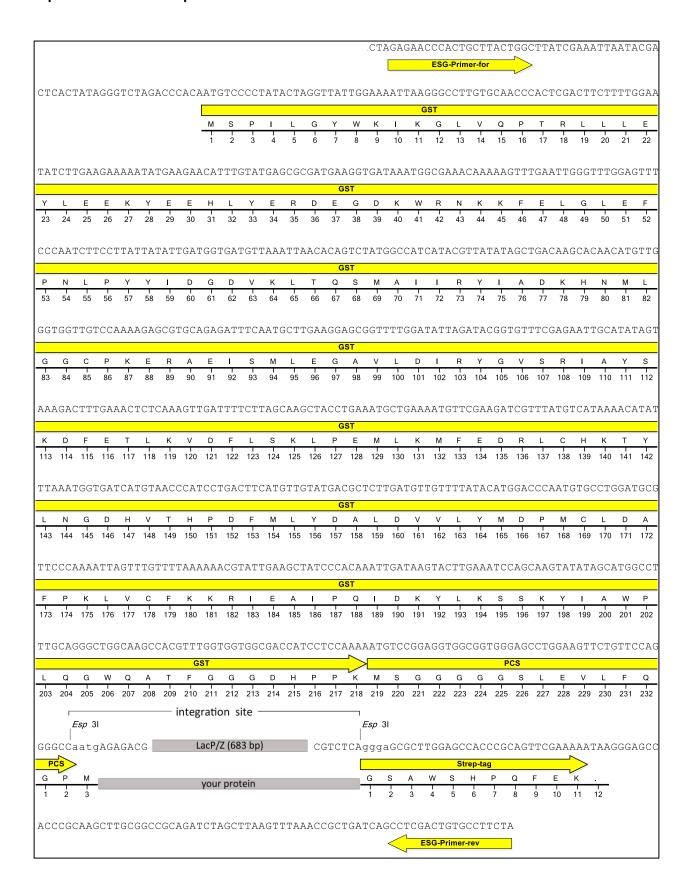
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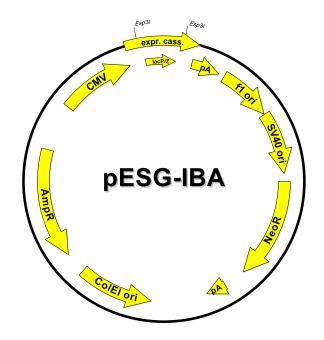
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Expression cassette of pESG-IBA23



Expression cassette of pESG-IBA23, continued

LacP/Z cassette = $\begin{array}{c} \text{contains LacZ alpha fragment under control} \\ \text{of a separate promoter, which allows alpha} \\ \text{complementation of } \textit{LacZ mutations such as} \\ \textit{LacZ}\Delta\textit{M15} \text{ as in } \textit{E. coli} \text{ DH5}\alpha \text{ or TOP10.} \\ \text{your protein =} \\ \text{of interest will be located here} \\ \end{array}$



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	- ESG-FTIIIIet-TeV
forward primer binding site	5221	5241	5'- TAGAAGGCACAGTCGAGG -3'
GST-tag	5284	5937	
PreScission™ protease site (PCS)	5938	5985	
LacZ alpha fragment	6214	6615	
Strep-tag®II	6679	6711	
reverse primer binding site	6773	6790	
polyA signal sequence	1	213	
total vector length		6790	