



IBA Lifesciences GmbH
Rudolf-Wissell-Str. 28
37079 Goettingen
Germany
Tel.: +49 (0) 551-5 06 72-0
E-mail: info@iba-lifesciences.com
www.iba-lifesciences.com

Data Sheet

pDSG-IBA104

Cat. No.: 5-5221-001

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Description	StarGate Acceptor Vector is a small transient expression vector especially developed for the use in combination with the MEXi mammalian expression system. In addition, it contains the human cytomegalovirus (CMV) immediate-early promoter for high-level expression and the origin of replication from Epstein-Barr Virus (oriP) for extrachromosomal replication driven by EBNA-1 expressed by MEXi-293E cells. The expressed recombinant protein will be secreted in the cell culture 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
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

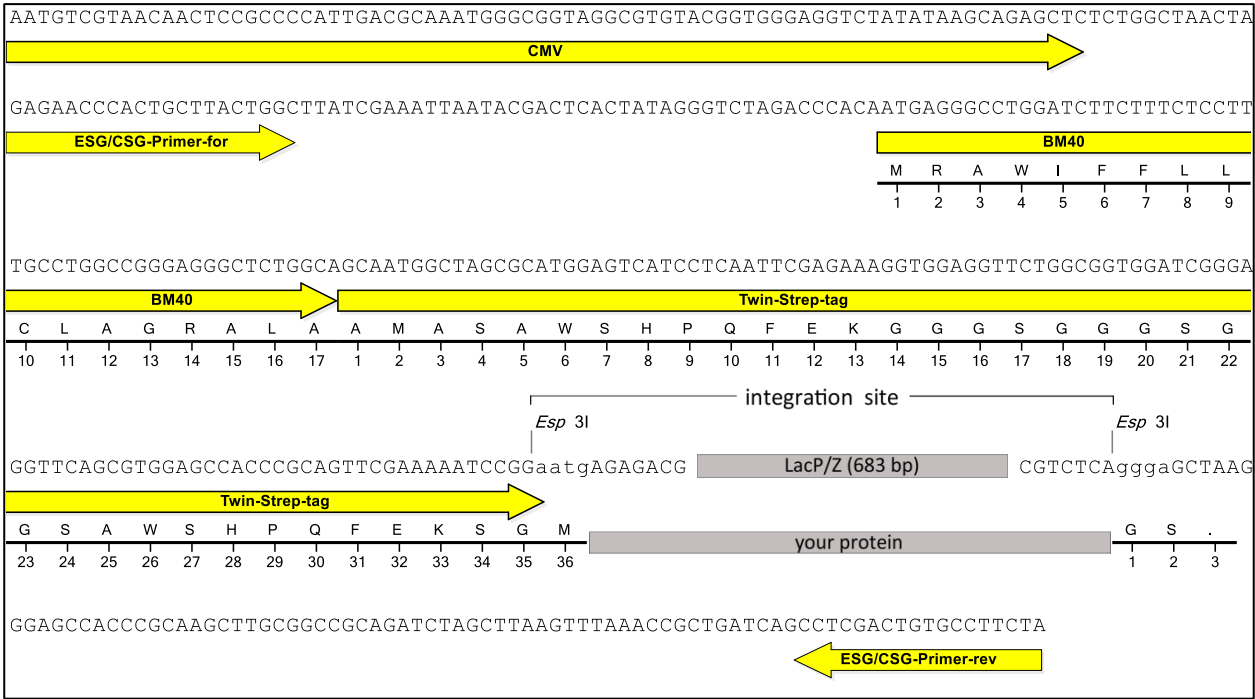
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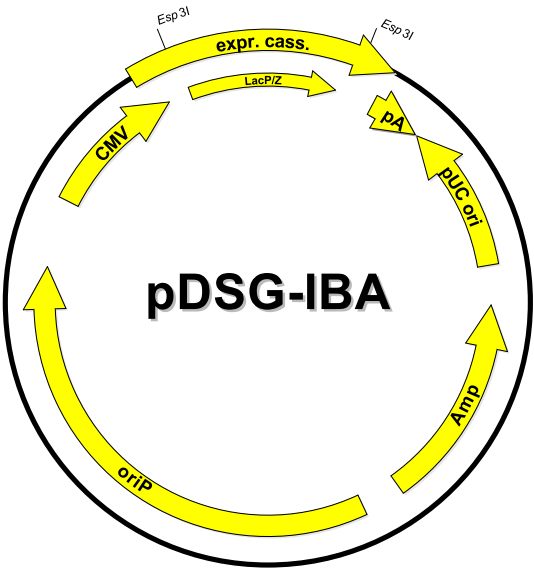
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Expression cassette of pDSG-IBA104



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 *Esp3I* your gene of interest will be located here



Features	from bp	to bp	Sequencing primer
polyA signal sequence	1	213	ESG/CSG-Primer-for 5' – GAGAACCCACTGCTTACTGGC – 3' ESG/CSG-Primer-rev 5' – TAGAAGGCACAGTCGAGG – 3'
pUC ori origin	222	836	
Ampicillin resistance gene	999	1856	
oriP, episomal replication origin	2021	3996	
CMV promoter	4277	4864	
forward primer binding site	4877	4897	
BM40 signal sequence	4941	4994	
Twin-Strep-tag®	4995	5096	
LacZ alpha fragment	5325	5726	
reverse primer binding site	5857	5874	
total vector length		5874	