

Data Sheet

pCSG-IBA142

Cat. No.: 5-5142-001

Version: 2.2

Lot No.: 5142-

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Description	<p>StarGate® Acceptor Vector designed for high-level episomal expression in mammalian hosts under G418 selection containing the following elements:</p> <ul style="list-style-type: none"> • Human cytomegalovirus (CMV) immediate-early promoter for high-level expression in a wide range of mammalian cells • Neomycin resistance gene for G418 selection of transfected cells • Episomal replication through Epstein Barr Virus replication origin (oriP) and nuclear antigen encoded by EBNA-1 in human, primate and canine cells and through SV40 replication origin in cells latently infected with SV40 or that express the SV40 large T antigen (e.g. COS-1, COS-7). • Ampicillin resistance and ColE1 replication origin (pUC) for propagation in <i>E. coli</i>. • The expressed recombinant protein will be secreted in the cell culture medium (BM40 signal sequence).
Affinity tag	<p>The recombinant protein will contain two affinity tags:</p> <ol style="list-style-type: none"> 1. Strep-Tactin affinity tag (Twin-Strep-tag) for purification of recombinant protein via Strep-Tactin resin. The Twin-Strep-tag is fused to the C-terminus of the recombinant protein. 2. 6xHistidine-tag for the purification of recombinant protein via Ni-NTA resins. The 6xHistidine-tag is fused to the N-terminus of the recombinant protein.
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.

For research use only

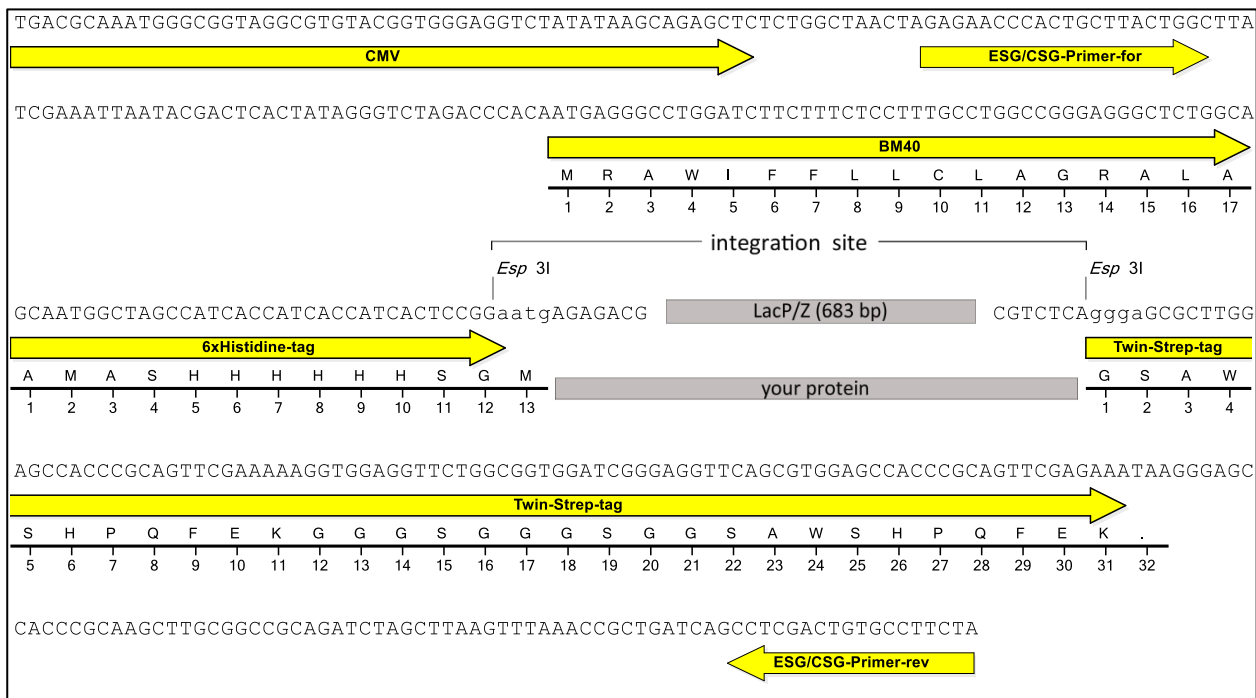
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This product is based on StarGate, One-STrEP-tag, 6xHistidine-tag and CMV promoter technologies covered by intellectual property (IP) rights and on completion of the sale IBA grants respective Limited Use Label Licenses to purchaser. IP rights and Limited Use Label Licenses for said technology are further described and identified at <http://www.iba-lifesciences.com/patents.html> or upon inquiry at info@iba-lifesciences.com or at IBA GmbH, Rudolf-Wissell-Str. 28, 37079 Goettingen, Germany. By use of this product the purchaser accepts the terms and conditions of all applicable Limited Use Label Licenses.

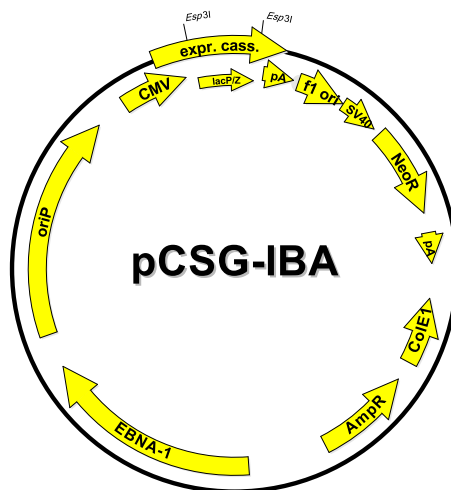
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Expression cassette of pCSG-IBA142



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 (Cat. No. 5-0000-121) 5' - GAGAACCCACTGCTTACTGGC -3'
f1 origin	259	687	
SV40 ori	692	1035	
Neomycin resistance gene	1097	1891	ESG/CSG-Primer-rev (Cat. No. 5-0000-122) 5' - TAGAAGGCACAGTCGAGG -3'
ColEI ori	2637	3222	
Ampicillin resistance gene	4253	3393	
EBNA-1	4944	6869	
oriPisosomal replication origin	7170	9145	
CMV promoter	9426	10013	
forward primer binding site	10026	10046	
BM40 signal sequence	10089	10142	
6xHistidine-tag	10143	10175	
LacZ alpha fragment	10404	10805	
Twin-Strep-tag	10869	10961	
reverse primer binding site	11023	11040	
total vector length		11040	



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