



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

pCSG-IBA45

Cat. No.: 5-5045-001

Version: 3.0
Revision Date: 28.07.2021

Description	StarGate Acceptor Vector for transient expression as well as for generation of stable mammalian cell lines. Extrachromosomal replication in mammalian cells could occur either by origin of replication from Epstein-Barr Virus (oriP) or by SV40 ori. For the former the vector provides the EBNA-1 gene and for the latter the cell line has to be latently infected with SV40 or express the SV40 large T antigen (e.g., HEK293T, COS-1, COS-7). Stable cell lines can be selected by the neomycin resistance gene (NeoR). In addition, the human cytomegalovirus (CMV) immediate-early promoter enables a high-level expression in a wide range of mammalian cells. The expressed recombinant protein will be localized in the cytoplasm.
Affinity tag	Strep-tag®II is fused to the N-terminus and 6xHistidine-tag is fused to the C-terminus of the recombinant protein.
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

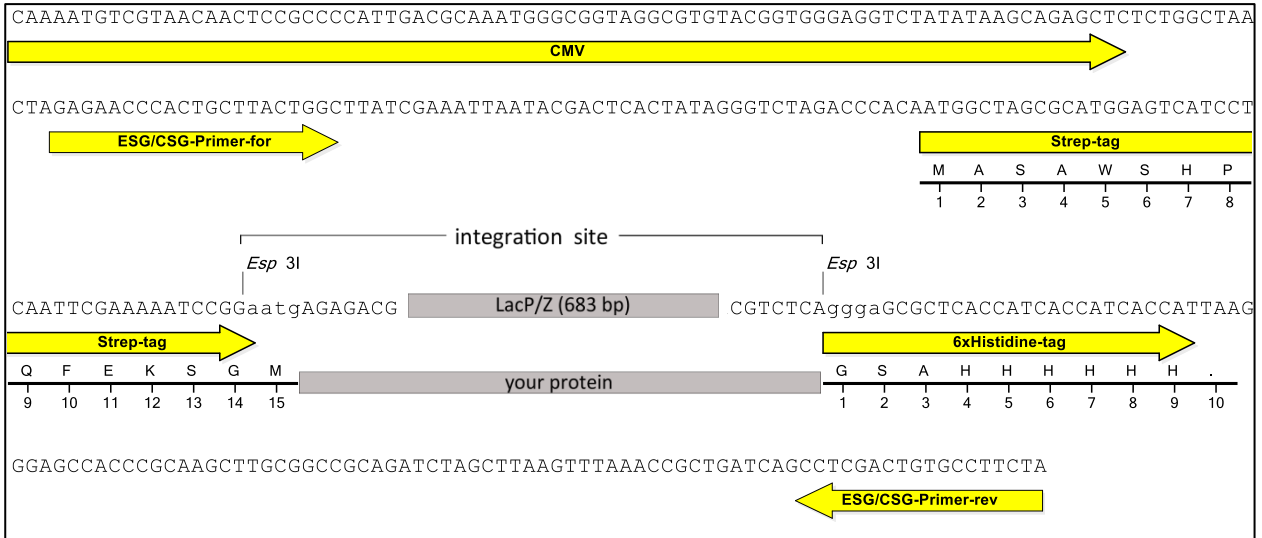
Trademark information

The owners of trademarks marked by “®” or “TM” are identified at <http://www.iba-lifesciences.com/patents.html>. Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

Important licensing information

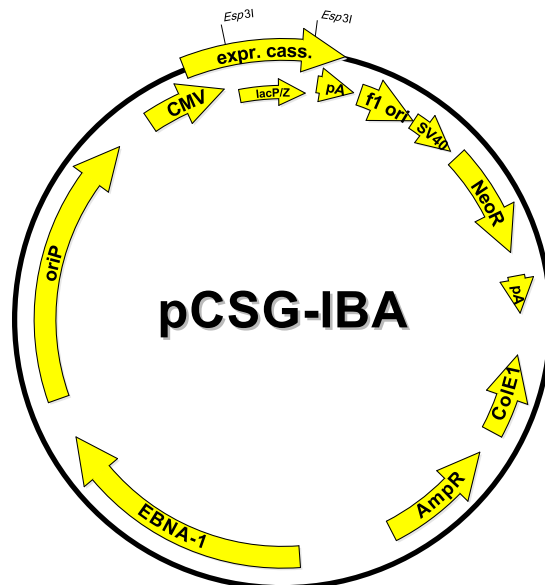
This product is covered by intellectual property (IP) rights and on completion of the sale IBA Lifesciences grants respective Limited Use Label Licenses to purchaser. IP rights and Limited Use Label Licenses for said technology are further described and identified at <http://www.iba-lifesciences.com/patents.html> or upon inquiry at info@iba-lifesciences.com or at IBA Lifesciences 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.

Expression cassette of pCSG-IBA45



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 *Esp31* 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'
f1 origin	259	687	
SV40 ori	692	1035	ESG/CSG-Primer-rev 5' - TAGAAGGCACAGTCGAGG -3'
Neomycin resistance gene	1097	1891	
ColE1 ori	2637	3222	
Ampicillin resistance gene	4253	3393	
EBNA-1	4944	6869	
oriP, episomal replication origin	7170	9145	
CMV promoter	9426	10013	
forward primer binding site	10026	10046	
Strep-tag®II	10089	10130	
LacZ alpha fragment	10359	10760	
6xHistidine-tag	10824	10850	
reverse primer binding site	10912	10929	
total vector length		10929	