

## Data Sheet

### pCSG-IBA105

Cat. No.: 5-5105-001

Version: 2.3

Lot No.: 5105-

Revision Date: 24.06.2020

<b>Description</b>	StarGate® Acceptor Vector designed for high-level episomal expression in mammalian hosts under G418 selection containing the following elements: <ul style="list-style-type: none"> <li>• Human cytomegalovirus (CMV) immediate-early promoter for high-level expression in a wide range of mammalian cells</li> <li>• Neomycin resistance gene for G418 selection of transfected cells</li> <li>• 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).</li> <li>• Ampicillin resistance and ColE1 replication origin (pUC) for propagation in <i>E. coli</i>.</li> <li>• The expressed recombinant protein will be localized in the cytoplasm.</li> </ul>
<b>Affinity tag</b>	Strep-Tactin affinity tag (Twin-Strep-tag) for purification of recombinant protein via Strep-Tactin resin. The Twin-Strep-tag is fused to the N-terminus of the recombinant protein.
<b>Resistance</b>	Ampicillin
<b>Form</b>	5 µg, dissolved in 20 µl TE buffer, pH 8,0: 10 mM Tris-HCl, 1 mM EDTA
<b>Concentration</b>	250 ng/µl
<b>Stability</b>	12 months after shipping
<b>Storage</b>	recommended: 2-8 °C for frequent usage, -20 °C for long-term storage
<b>Shipping</b>	room temperature
<b>Hazards</b>	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.



Go digital and help the environment. Please download all up-to-date manuals, protocols and other material from <http://www.iba-lifesciences.com>.

#### For research use only

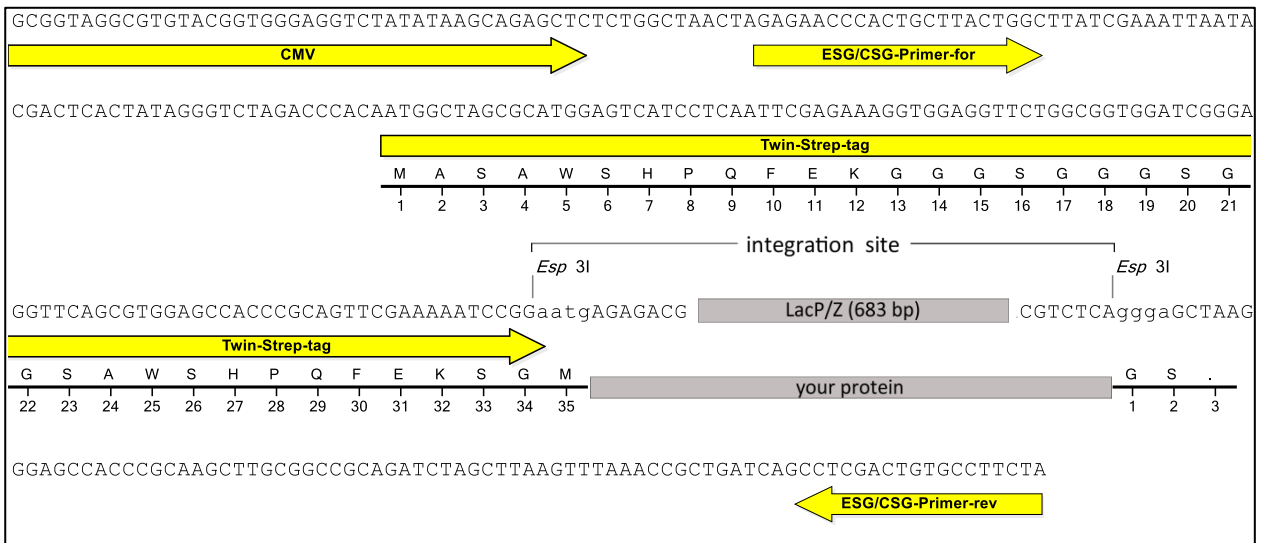
##### Important licensing information

This product is based on StarGate, One-STrEP-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](mailto: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.

##### Trademark information

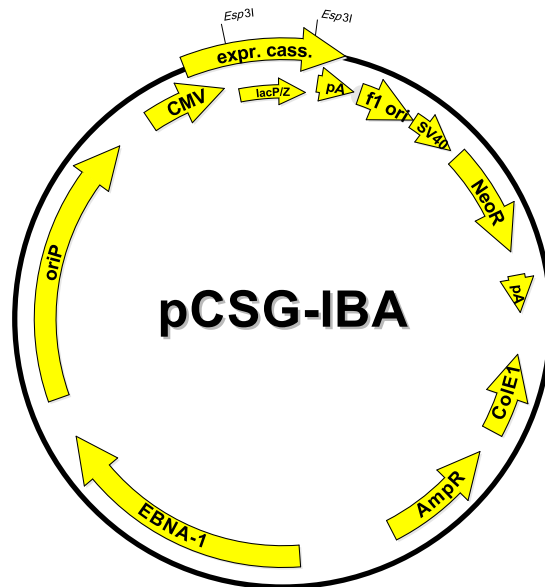
The owners of trademarks marked by “®” or “TM” are identified at <http://www.iba-lifesciences.com/patents.html>. Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

## Expression cassette of pCSG-IBA105



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)
f1 origin	259	687	5' - GAGAACCCACTGCTTACTGGC -3'
SV40 ori	692	1035	
Neomycin resistance gene	1097	1891	
ColEI ori	2637	3222	
Ampicillin resistance gene	4253	3393	ESG/CSG-Primer-rev (Cat. No. 5-0000-122)
EBNA-1	4944	6869	5' - TAGAAGGCACAGTCGAGG -3'
oriPepisomal replication origin	7170	9145	
CMV promoter	9426	10013	
forward primer binding site	10026	10046	
Twin-Strep-tag	10089	10193	
LacZ alpha fragment	10419	10820	
reverse primer binding site	10951	10968	
total vector length		10968	