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## **Data Sheet**

# pDSG-IBAwt2

Cat. No.: 5-5201-001

Version: 3.0

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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	no affinity tag		
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

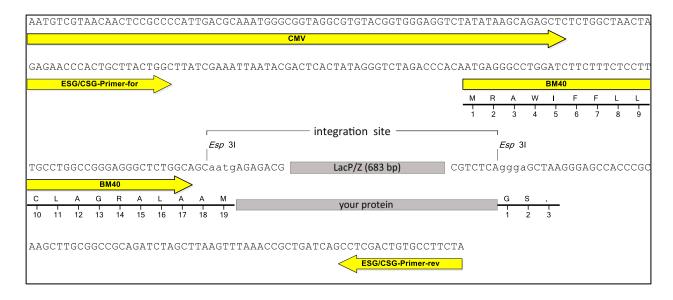
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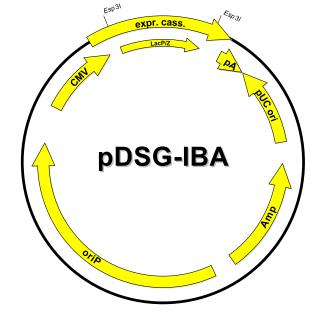
### Expression cassette of pDSG-IBAwt2



LacP/Z cassette = contains LacZ alpha fragment under control of a separate promoter, which allows alpha complementation of LacZ mutations such as

 $LacZ\Delta M15$  as in *E. coli* DH5 $\alpha$  or TOP10. after StarGate cloning using *Esp3*l your gene of interest will be located here

your protein =



Features	from bp	to bp	Sequencing primer
polyA signal sequence	1	213	ESG/CSG-Primer-for
pUC ori origin	222	836	
Ampicillin resistance gene	999	1856	5'- GAGAACCCACTGCTTACTGGC -3'
oriP episomal replication origin	2021	3996	
CMV promoter	4277	4864	FSC /CSC Duimon nov
forward primer binding site	4877	4897	ESG/CSG-Primer-rev
BM40 signal sequence	4940	4993	5'- TAGAAGGCACAGTCGAGG -3'
LacZ alpha fragment	5222	5523	
reverse primer binding site	5754	5771	
total vector length		5771	