

## Data Sheet

### pYSG-IBA167

Cat. No.: 5-4767-001

Version: 2.2

Lot No.: 4767-

Revision Date: 09.03.20

<b>Description</b>	StarGate® Acceptor Vector designed for high-level expression in yeast containing the following elements: <ul style="list-style-type: none"> <li>• Copper inducible promoter (CUP1) for controlled high-level expression</li> <li>• URA3 auxotrophy marker for selection after transformation (do not use URA3 for selection during expression)</li> <li>• LEU2d auxotrophy marker for selection to increase plasmid copy number for expression (do not use LEU2d for selection after transformation)</li> <li>• 2<math>\mu</math> ori for episomal replication in yeast</li> <li>• The expressed recombinant protein will be localized in the cytoplasm.</li> </ul>
<b>Yeast Expression</b>	Cultivate transformed yeast cells under LEU2d selection until OD600 reaches 0.8 – 1.2 absorbance units. Induce protein expression by addition of copper sulphate to a final concentration of 0.5 mM.
<b>Affinity tag</b>	The recombinant protein will contain two affinity tags fused to the N-terminus: <ol style="list-style-type: none"> <li>1. Distal: FLAG-tag for the purification of recombinant protein via anti-FLAG M2 agarose column and a FLAG octapeptide for elution. These FLAG-products are not delivered by IBA but can be purchased from Sigma.</li> <li>2. Proximal: Strep-Tactin affinity tag (Twin-Strep-tag) for purification of recombinant protein via Strep-Tactin resin.</li> </ol> This combination of tags can be used to perform Two-TAP analysis (Two-tag Tandem Affinity Purification) as published by Gloeckner et al. (2007) Proteomics 7, 4228-4234
<b>Resistance</b>	Ampicillin
<b>Form</b>	5 $\mu$ g, dissolved in 20 $\mu$ l TE buffer, pH 8,0: 10 mM Tris-HCl, 1 mM EDTA
<b>Concentration</b>	250 ng/ $\mu$ l
<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.

#### For research use only

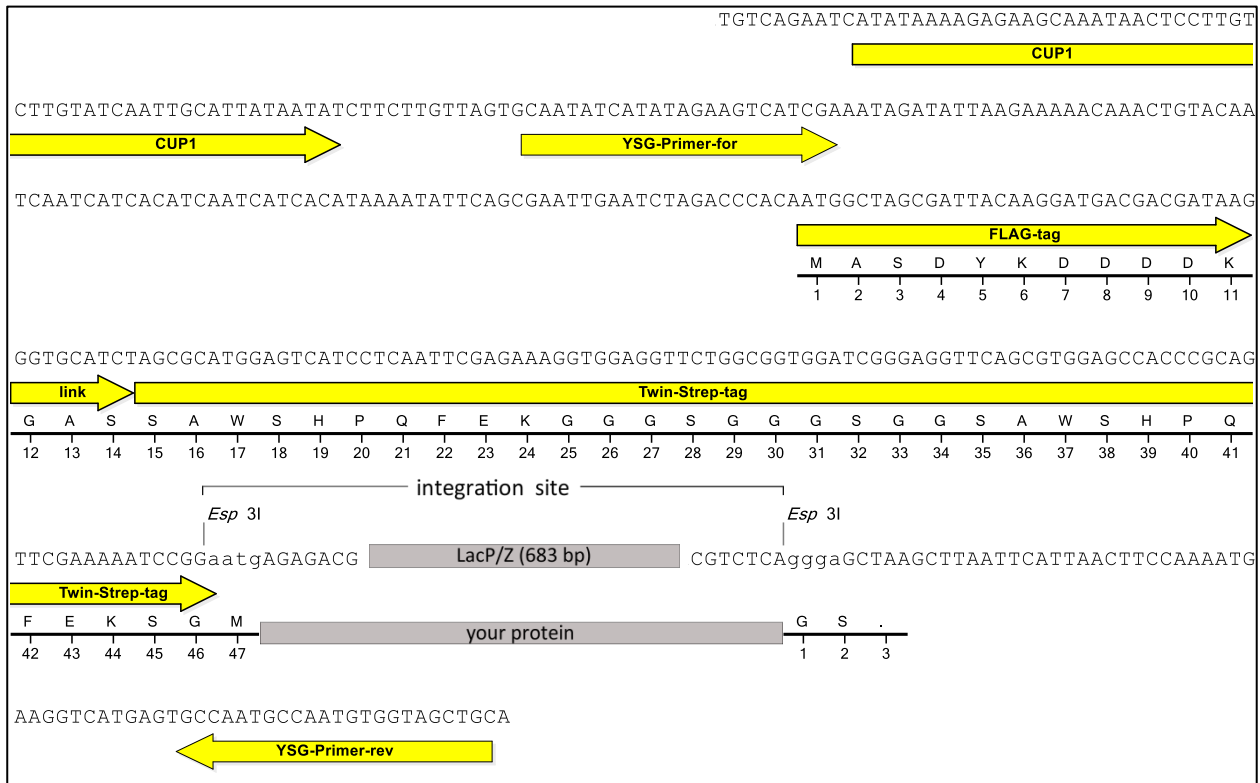
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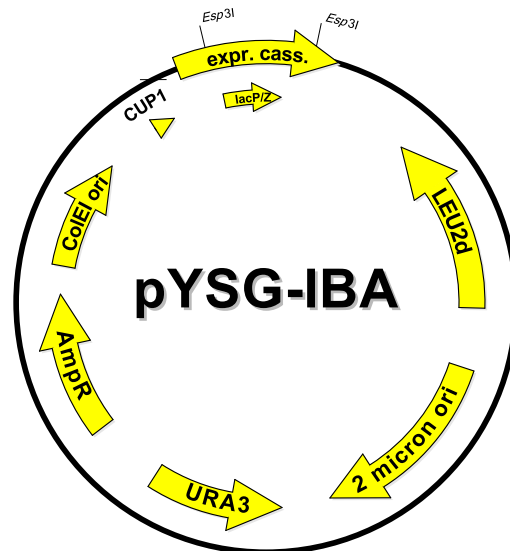
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## Expression cassette of pYSG-IBA167



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
LEU2d	1668	574	YSG-Primer-for (Cat. No. 5-0000-141)
2 micron ori	2032	3194	
URA3	4293	3490	5' - CAATATCATATAGAAGTCATCGA -3'
Ampicillin resistance gene	4725	5585	YSG-Primer-rev (Cat. No. 5-0000-142)
ColE1ori	5756	6345	
CUP1 promoter	6873	6925	5' - GCAGCTACCACATTGGCATTTGCC -3'
forward primer binding site	6939	6961	
FLAG-tag	7049	7081	
Twin-Strep-tag	7091	7186	
LacZ alpha fragment	7415	7816	
reverse primer binding site	7926	7948	
total vector length		7949	



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