

Data Sheet

pYSG-IBA123

Cat. No.: 5-4723-001

Version: 2.1

Lot No.: 4723-

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Description	StarGate® Acceptor Vector designed for high-level expression in yeast containing the following elements: <ul style="list-style-type: none"> • Copper inducible promoter (CUP1) for controlled high-level expression • URA3 auxotrophy marker for selection after transformation (do not use URA3 for selection during expression) • LEU2d auxotrophy marker for selection to increase plasmid copy number for expression (do not use LEU2d for selection after transformation) • 2μ ori for episomal replication in yeast • The expressed recombinant protein will be localized in the cytoplasm.
Yeast Expression	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.
Affinity tag	The recombinant protein will contain two affinity tags: <ol style="list-style-type: none"> 1. GST-tag (Glutathione-S-Transferase) for the purification of recombinant protein. The affinity tag is fused to the N-terminus of the recombinant protein. After purification the GST may be removed by digesting with PreScission™ Protease. 2. 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.
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.
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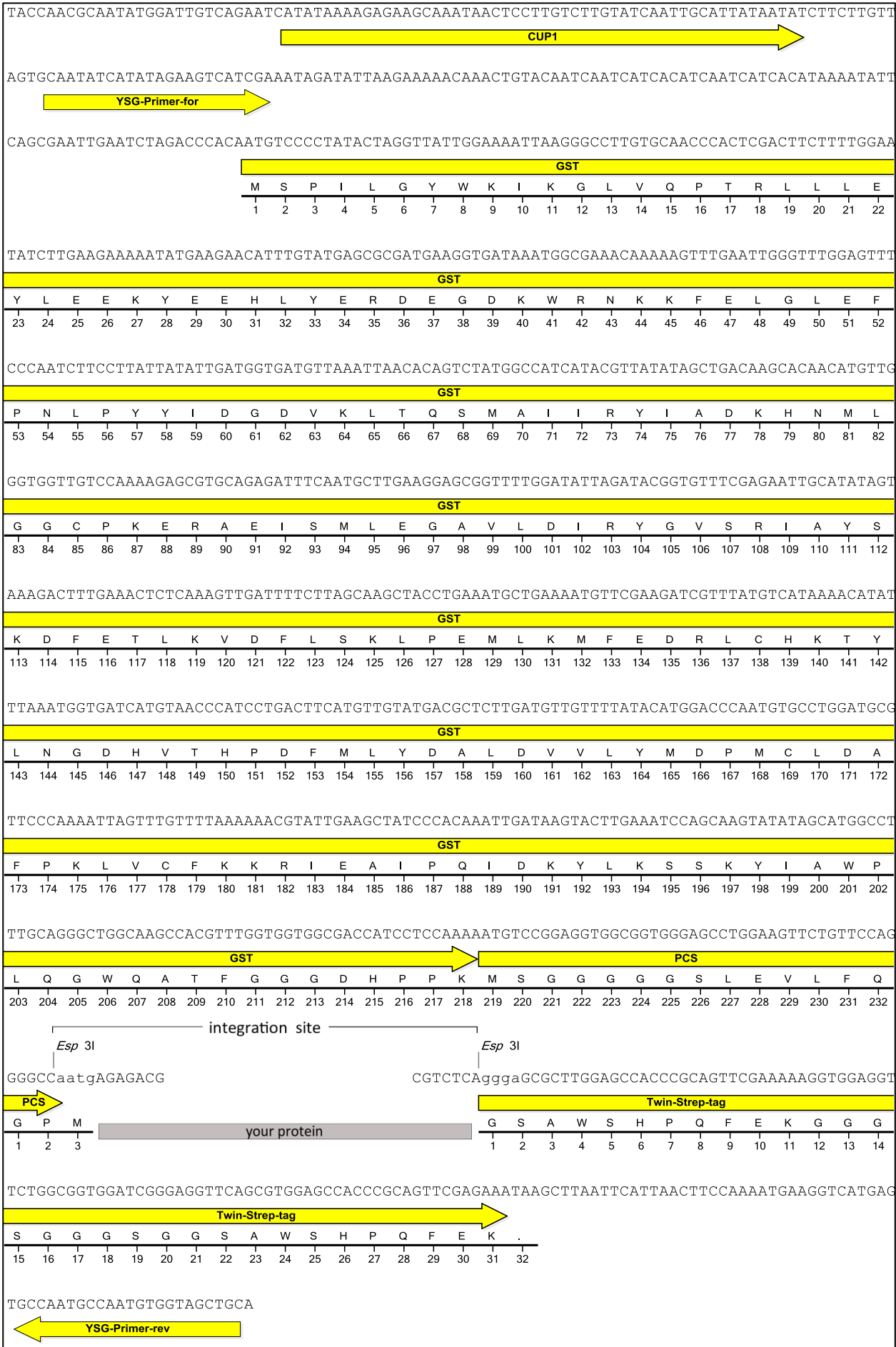
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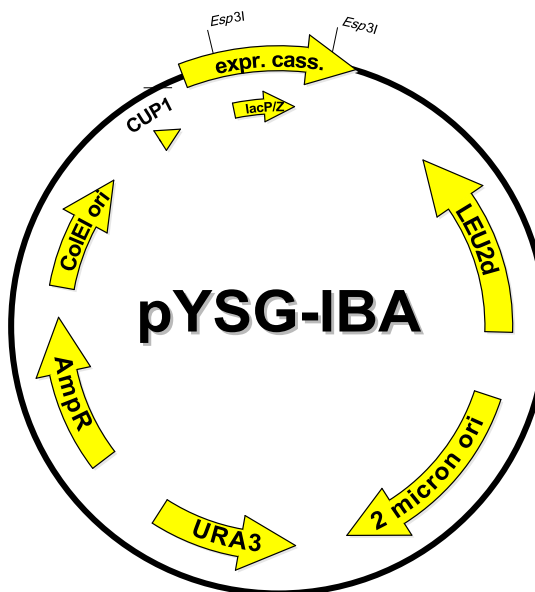
Expression cassette of pYSG-IBA123



Expression cassette of pYSG-IBA123, continued

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
LEU2d	1668	574	YSG-Primer-for (Cat. No. 5-0000-141) 5' - CAATATCATATAGAAGTCATCGA -3'
2 micron ori	2032	3194	
URA3	4293	3490	
Ampicillin resistance gene	4725	5585	YSG-Primer-rev (Cat. No. 5-0000-142) 5' - GCAGCTACCACATTGGCATTGGC -3'
ColEI ori	5756	6345	
CUP1 promoter	6873	6925	
forward primer binding site	6939	6961	
GST-tag	7049	7702	
PreScission™ Protease site (PCS)	7703	7750	
LacZ alpha fragment	7979	8380	
Twin-Strep-tag	8444	8536	
reverse primer binding site	8577	8599	
total vector length		8600	



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