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Data Sheet

pYSG-IBA45

Cat. No.: 5-4645-001

Version: 3.0
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Description	StarGate Acceptor Vector for high-level expression of target proteins in yeast. It carries the the copper-inducible promoter (CUP1) for controlled high-level expression, the URA3 auxotrophy marker for selection after transformation (do not use URA3 for selection during expression), the LEU2d auxotrophy marker for selection to increase plasmid copy number for expression (do not use LEU2d for selection after transformation), and the 2 micron ori for episomal replication in yeast.
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).
Yeast Expression	Cultivate transformed yeast cells under LEU2d selection until OD ₆₀₀ reaches 0.8-1.2. Induce protein expression by addition of copper sulphate to a final concentration of 0.5 mM.
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

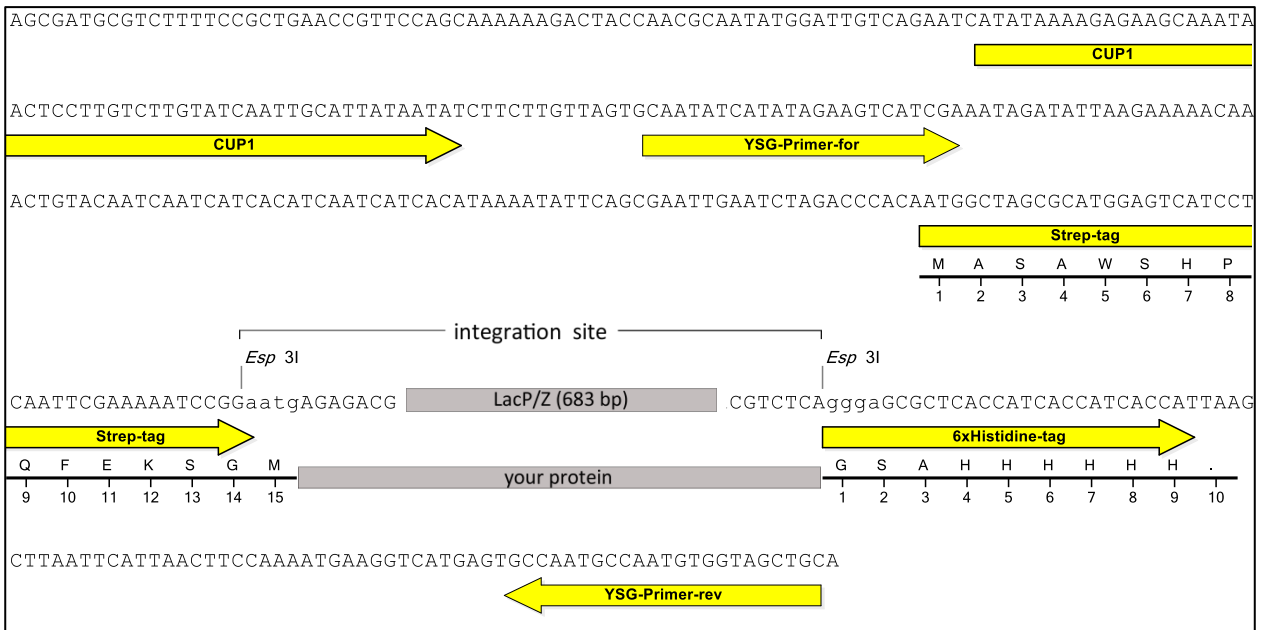
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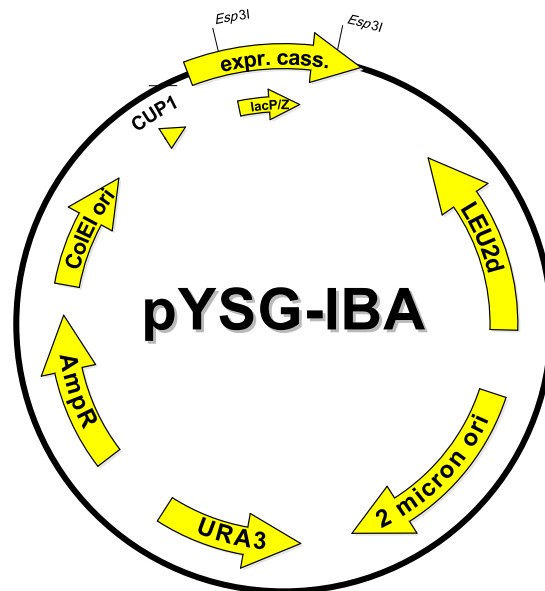
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Expression cassette of pYSG-IBA45



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 *Esp3I* your gene of interest will be located here



Features	from bp	to bp	Sequencing primer
LEU2d	1668	574	YSG-Primer-for 5' - CAATATCATATAGAAGTCATCGA -3' YSG-Primer-rev 5' - GCAGCTACCACATTGGCATTGGC -3'
2 micron ori	2032	3194	
URA3	4293	3490	
Ampicillin resistance gene	4725	5585	
ColEI ori	5756	6345	
CUP1 promoter	6873	6925	
forward primer binding site	6939	6961	
Strep-tag®II	7049	7090	
LacZ alpha fragment	7319	7720	
6xHistidine-tag	7784	7810	
reverse primer binding site	7851	7873	
total vector length		7874	