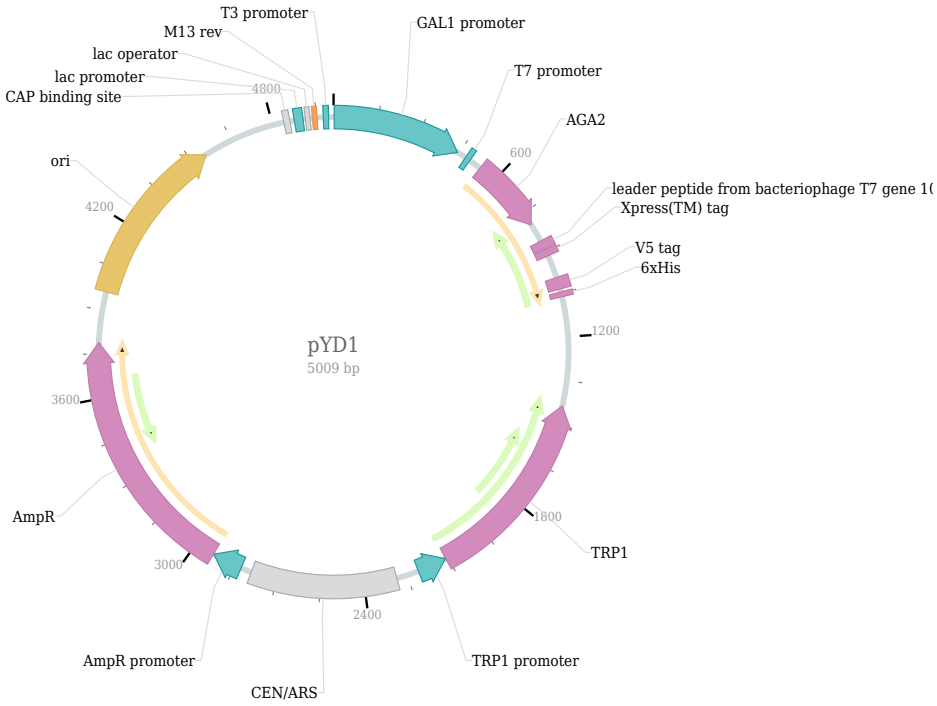
pYD1

Vector ID	V012745
Antibiotic Resistance	Ampicillin
Length	5009 bp
Vector Type	Yeast Plasmids

Product Information

Replication Origin	ori
Source/Author	Invitrogen
Selection Marker	TRP1
Copy Number	High copy number
Promoter	GAL1
Cloning Method	Enzyme Cut
5' Primer	pYD1-F: AGTAACGTTTGTCAGTAATTGC
3' Primer	pYD1-R: GTCGATTTTGTTACATCTACAC
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pYD1 is a 5.0 kb expression vector designed for expression, secretion, and display of proteins on the extracellular surface of Saccharomyces cerevisiae cells. The vector contains the following elements: 1. AGA2 gene from Saccharomyces cerevisiae. This gene encodes one of the subunits of the a-agglutinin receptor. Fusion of the gene of interest to AGA2 allows secretion and display of the protein of interest. 2. GAL1 promoter for regulated expression of the AGA2 gene fusion. 3. Xpress epitope and V5 epitope for detection of the displayed protein. 4. Polyhistidine (6xHis) tag for detection and possible purification on metal chelating resin. 5. TRP1 gene for selection in Saccharomyces cerevisiae. 6. CEN6/ARS4 for stable, episomal replication in yeast. 7. Ampicillin resistance gene and the pUC origin for selection and replication in E. coli.

Vector Map



Plasmid Resuspension Protocol

1. Centrifuge at 5,000×g for 5 min.
2. Carefully open the tube and add sterile water to dissolve the DNA: add 20 µl for 5 µg plasmid, and 100 µl for 100 µg plasmid.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin to concentrate the liquid at the bottom. Speed is less than 5000×g.
5. Store the plasmid at -20 ℃.