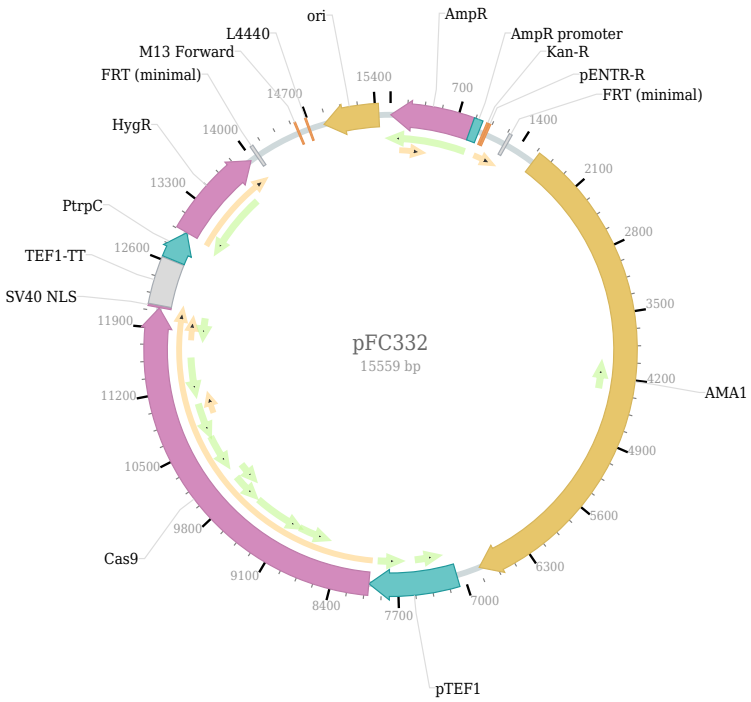
pFC332

Vector ID	V001284
Antibiotic Resistance	Ampicillin
Length	15559 bp
Vector Type	Bacterial Expression, CRISPR ; Fungal expression

Product Information

Replication Origin	ori
Selection Marker	Hygromycin
Promoter	Aspergillus nidulans trpC promoter
5' Primer	GCTAGTGGAGGTCAACACATCAATGC
Growth Strain(s)	stbl3
Comment	AMA1 is a key autonomous plasmid replication element identified in Aspergillus nidulans, structurally consisting of two inverted MATE elements flanking a 0.3-kb central spacer and featuring symmetric Sau3A restriction sites at its ends. It functions as a highly efficient plasmid replicator, boosting transformation frequencies by 100- to 2000-fold and maintaining 10-20 plasmid copies per nucleus, with stable phenotypes (40-60% of spores carrying the plasmid on selective media) and minimal rearrangement or chromosomal integration. Unlike transformation enhancers like ANS1 or single MATE elements that cause plasmid rearrangement, AMA1 supports stable extrachromosomal replication independently, making it valuable for gene cloning (e.g., "instant gene bank" methods) and gene expression studies across Aspergillus, Penicillium, and other fungal genera. This is an AMA1 plasmid with Aspergillus optimized Cas9 and Hyg selection marker.

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 ℃.