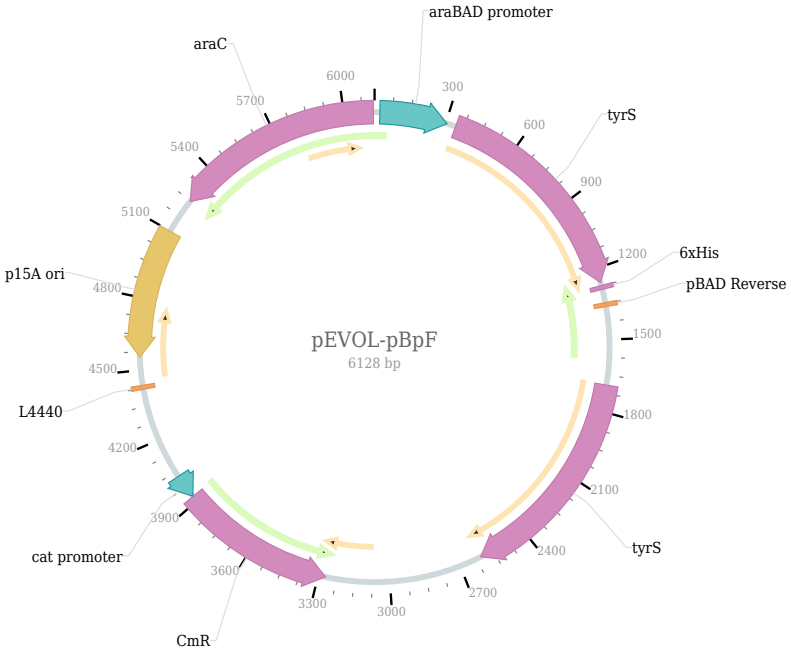
pEVOL-pBpF

Vector ID	V012597
Antibiotic Resistance	Chloramphenicol
Length	6128 bp
Vector Type	Bacterial Expression

Product Information

Replication Origin	p15A ori
Copy Number	High Copy
Promoter	araBAD
Cloning Method	Restriction Enzyme
5' Primer	ATTAGCGGATCCTACCTGACGCTTTTTATCGCAACTCTCTACTGTTTCTCCATACCCGTTTTTT
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	The pEVOL-pBpF plasmid enables site-specific incorporation of the non-canonical amino acid (UAA) para-benzoyl-L-phenylalanine (pBpF) into proteins via an orthogonal tRNA/synthetase pair. It suppresses the amber (UAG) stop codon, allowing photo-crosslinking applications for studying protein-protein interactions. Key features include: Orthogonal AaRS/tRNA for pBpF charging; Amber codon suppression for UAA insertion; UV-activatable pBpF for covalent crosslinking.

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 ℃.