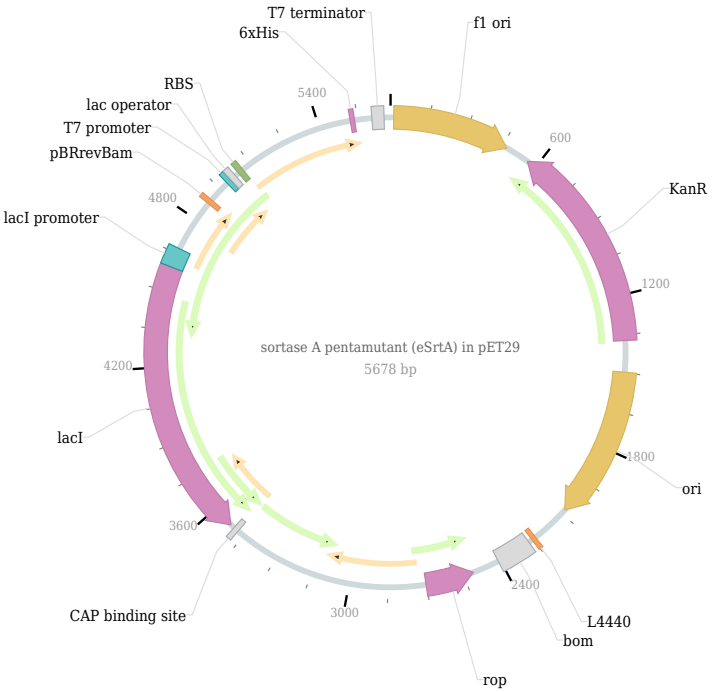
sortase A pentamutant (eSrtA) in pET29

Vector ID	V012143
Antibiotic Resistance	Kanamycin
Length	5678 bp
Vector Type	Bacterial Expression

Product Information

Replication Origin	ori
Copy Number	High Copy
Promoter	T7
Cloning Method	Restriction Enzyme
5' Primer	T7
3' Primer	T7-term
Growth Temperature	37℃
Comment	sortase A pentamutant (eSrtA) in pET29 is a bacterial expression plasmid encoding the evolved Staphylococcus aureus sortase A pentamutant eSrtA (residues 60–206; P94R/D160N/D165A/K190E/K196T). The pET29 backbone supplies a high-copy pBR322 ori, f1 ori, lacI and KanR; a T7 promoter with lac operator and RBS drives the C-terminally 6×His-tagged eSrtA cloned NdeI/XhoI. Selected by yeast display, eSrtA has 120-fold higher kcat/KM(LPETG) than wild type (Chen et al., PNAS 2011).

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 ℃.