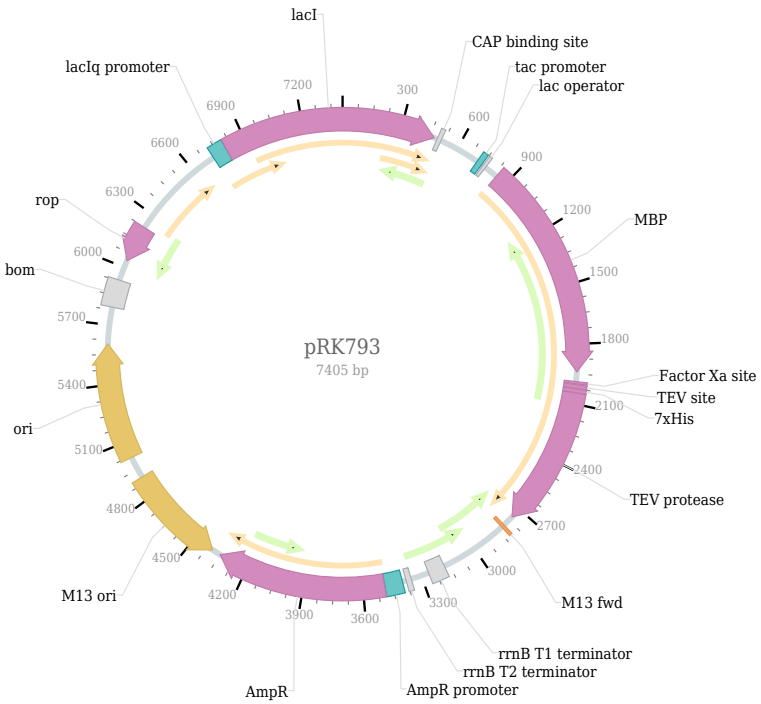
pRK793

Vector ID	V010082
Antibiotic Resistance	Chloramphenicol, Ampicillin
Length	7405 bp
Vector Type	Bacterial Expression

Product Information

Replication Origin	ori
Copy Number	Low Copy
Cloning Method	Restriction Enzyme
3' Primer	M13-F20
Growth Strain(s)	stbl3
Growth Temperature	37℃
Comment	pRK793 is a bacterial expression plasmid (7.4 kb) designed for high-yield production of the catalytic domain of Tobacco Etch Virus (TEV) protease. It encodes an auto-cleavable maltose-binding protein (MBP) fusion protein containing a TEV protease with an S219V stability mutation. The construct features an N-terminal His-tag and a C-terminal polyarginine tag to facilitate purification. Upon IPTG induction in specific E. coli strains like BL21(DE3)-RIL, the fusion protein undergoes in vivo self-cleavage to release the active, soluble TEV protease, which is widely used for removing fusion tags from recombinant proteins.

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 ℃.