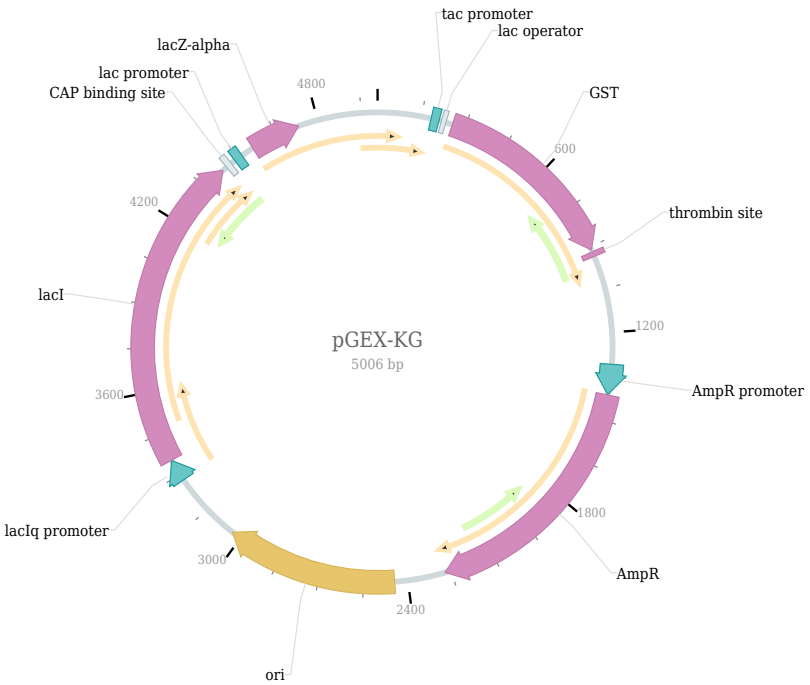
pGEX-KG

Vector ID	V012841
Accession ID	pGEXKG
Antibiotic Resistance	Ampicillin
Length	5006 bp
Vector Type	Protein expression
Host	E. coli

Product Information

Replication Origin	ori
Copy Number	High copy number
Promoter	Tac
Growth Strain(s)	DH5a
Growth Temperature	37℃
Comment	pGEX-KG is a bacterial expression vector for high-level production of proteins fused with GST (glutathione S-transferase). The tac promoter (with lac operator) enables IPTG-inducible expression of the fusion protein. An N-terminal thrombin protease site and a downstream glycine-rich "kinker" sequence improve cleavage efficiency to release the target protein from GST . The vector also includes AmpR (ampicillin resistance) for selection, a ColE1 ori for high-copy replication, and lacIq for tight transcriptional regulation.

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 ℃.