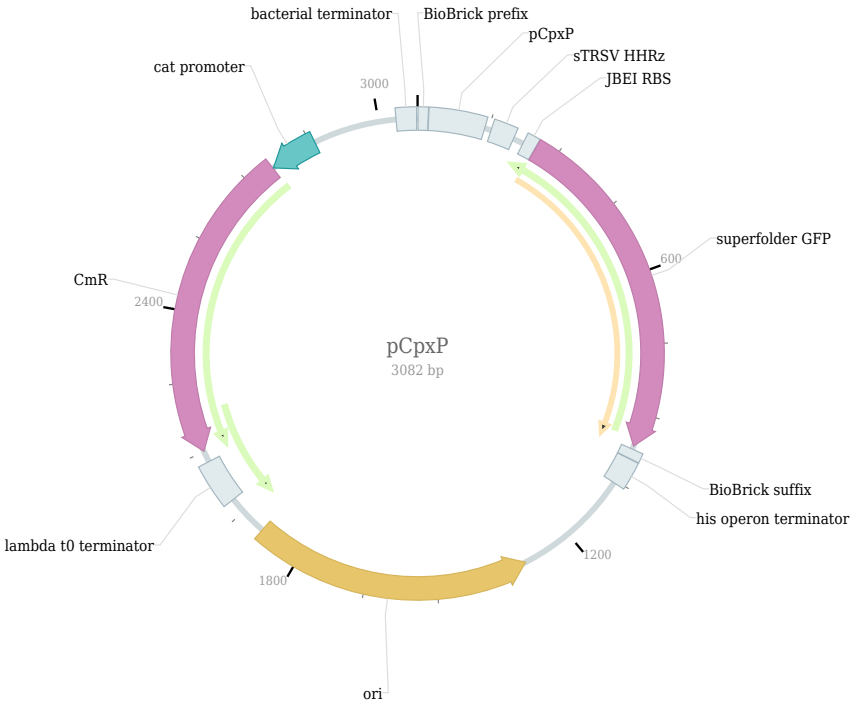
pCpxP

Vector ID	V008211
Antibiotic Resistance	Chloramphenicol
Length	3082 bp
Vector Type	Measurement vector

Product Information

Replication Origin	ori
Source/Author	Courbet A, Endy D, Renard E, Molina F, Bonnet J.
Growth Strain(s)	DH5a
Growth Temperature	37℃
Comment	The pCpxP-based plasmid contains the Escherichia coli pCpxP promoter activated by glucose, pyruvate or acetate. While native pCpxP-reporter constructs exhibit high basal expression and low signal-to-noise ratio in human urine and serum, pCpxP controller plasmids driving serine integrase (BxB1 or TP901-1) produce near-digital all-or-none responses via amplifying genetic switches, permitting sensitive detection of pathological glycosuria in patient-derived urine samples (Courbet et al., Sci. Transl. Med., 2015).

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 ℃.