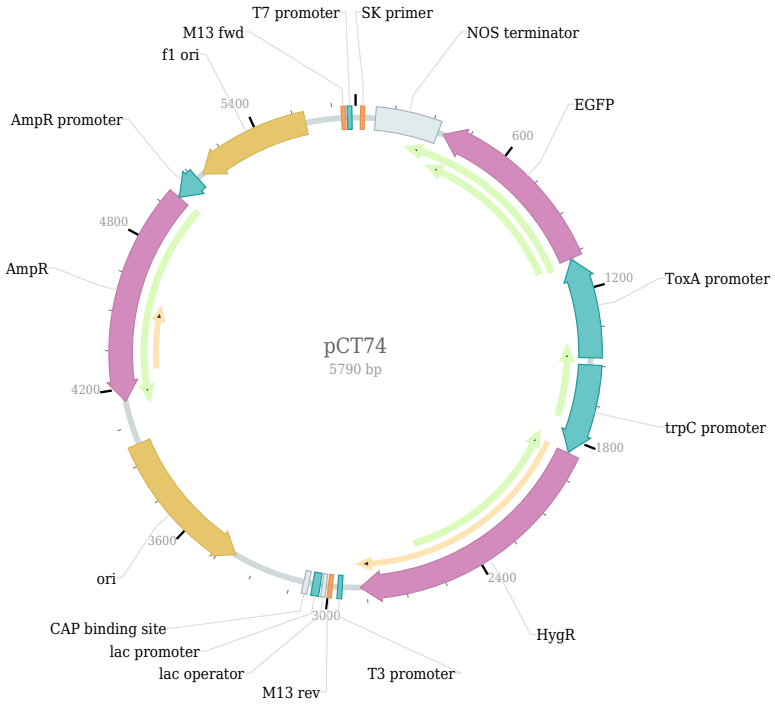
pCT74

Vector ID	V013142
Accession ID	pCT74-Hygro-sGFP
Antibiotic Resistance	Ampicillin
Length	5790 bp
Vector Type	Protein expression
Host	Hyphal fungi

Product Information

Replication Origin	ori
Selection Marker	Hyg
Promoter	trpC
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pCT74 is a fungal expression vector with ToxA promoter driving sGFP green fluorescent protein, hygromycin B resistance, for fungal cell visualization and transformation efficiency monitoring in filamentous fungi. The ToxA promoter originates from the wheat pathogen Pyrenophora tritici-repentis. Truncated versions are widely used as a moderate-to-strong constitutive promoter for heterologous gene expression in diverse filamentous ascomycetes. It shows no activity in mammalian cells or Saccharomyces cerevisiae. Although the native ToxA effector gene is infection-induced in its original host, the isolated promoter fragment drives constitutive reporter expression in heterologous fungal species.

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 ℃.