# pCold-GST

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| **Vector ID** | V012903 |
| **Accession ID** | pColdGST |
| **Antibiotic Resistance** | Ampicillin |
| **Length** | 5097 bp |
| **Vector Type** | Protein expression |
| **Host** | E. coli |

## Product Information

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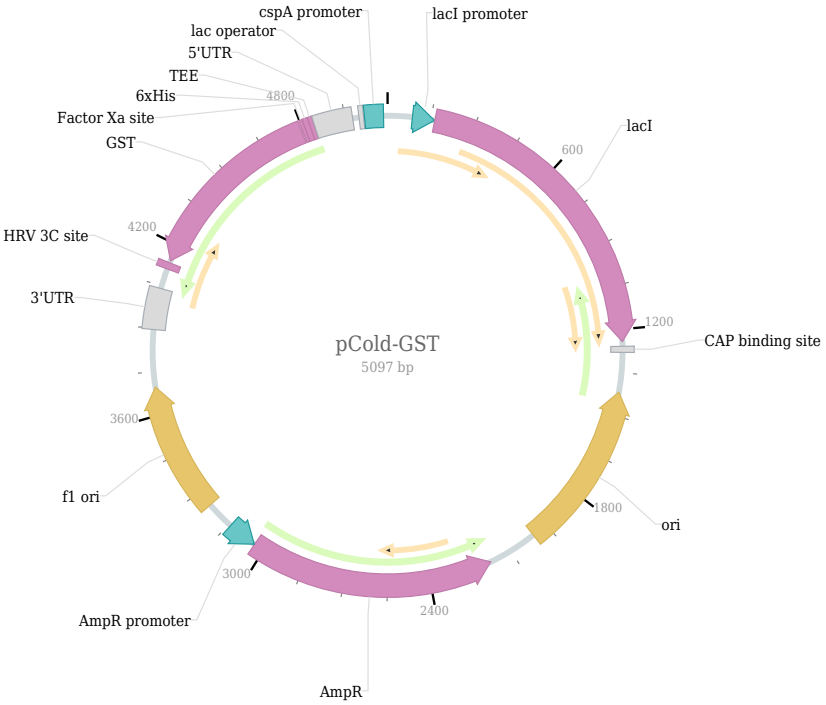
| **Replication Origin** | ori |
| **Promoter** | cspA |
| **Growth Strain(s)** | DH5a |
| **Growth Temperature** | 37℃ |
| **Comment** | The pCOLD-GST vector is a bacterial expression plasmid. It utilizes a cold-shock promoter (cspA) for enhanced recombinant protein expression at low temperatures (e.g., 15°C). The vector features an N-terminal GST tag for affinity purification via glutathione sepharose and often includes a His tag and an HRV 3C protease site for tag cleavage. It's widely used to improve protein solubility and yield in E. coli. |

## 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 ℃.