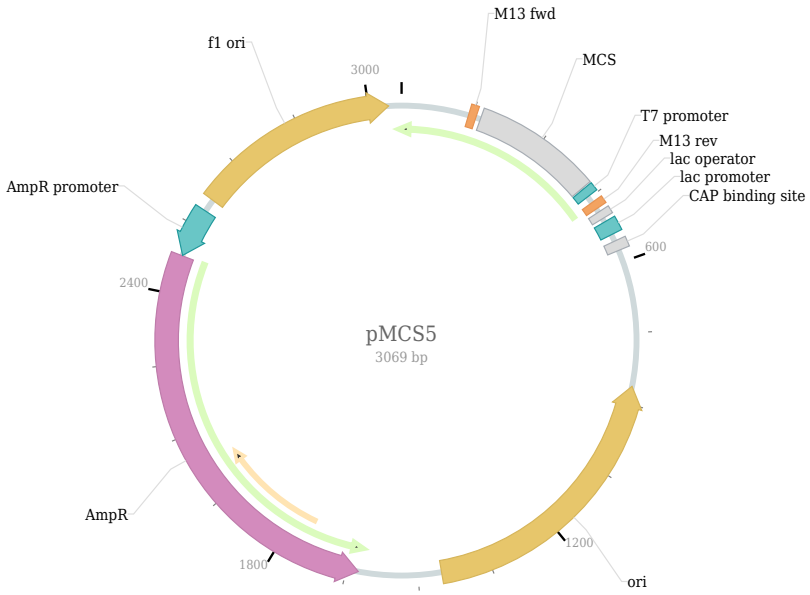
# pMCS5

| | |
|---|---|
| **Vector ID** | V012445 |
| **Antibiotic Resistance** | Ampicillin |
| **Length** | 3069 bp |
| **Vector Type** | Cloning Vectors |

## Product Information

| | |
|---|---|
| **Replication Origin** | ori |
| **Source/Author** | MoBiTec |
| **Copy Number** | High copy number |
| **Promoter** | T7 |
| **5' Primer** | M13 fwd |
| **3' Primer** | M13 rev |
| **Growth Strain(s)** | Top10 |
| **Growth Temperature** | 37℃ |
| **Comment** | pMCS5 is a specialized cloning vector featuring an extensive multiple cloning site (MCS) containing 59 unique restriction sites. This includes recognition sites for 46 hexamer-specific, 2 heptamer-specific, and all 10 known octanucleotide-specific restriction endonucleases, providing exceptional flexibility for DNA insertion. A key feature is the inclusion of a rare I-SceI meganuclease site, which enables precise linearization of recombinant clones. The vector supports blue/white selection for recombinant screening and contains an f1 origin for generating single-stranded DNA. |

## 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 ℃.