

A circular map of the pMKS Δ l plasmid construct, which is 4231 bp in size. The map shows several key features:

- Kan^r**: A dark red arc representing the kanamycin resistance gene.
- T7 promoter**: Indicated by a red arrow at the top right.
- luxR**: A dark red arc on the right side of the circle.
- P_{luxI}**: An arrow pointing clockwise from the luxR gene.
- luxI**: A dark red arc at the bottom right.
- pBR322 ori**: A black arc on the left side of the circle.
- MCS**: Multiple cloning site located between the pBR322 ori and the luxI gene. It contains numerous restriction enzyme sites: NotI, BglII, ScaI, XhoI, Aval, NdeI, HindIII, AccI, SalI, SacI, BamHI, EcoRI, BarnHI, SmaI, BstXI, NheI, and NdeI.
- Start Codon**: Located downstream of the MCS.
- Transcriptional terminator**: Located further downstream from the start codon.

MCS1 SacII BglI
NdeI NheI BamHI EcoRI SacI Sall HindIII NotI XhoI Stop codons
CATATGGCTAGCCGCGGATCCGAATTCGAGCTCCGTCGACAAGCTTGCGGCCGCACTCGAG
GTGACTGACTGA XhoI

MCS2 AatII EcoRI Sall NotI Stop codons
ATAATGAAGACGTCGAAGAATTCGTCGACTGCAGCGGCCGCGTGACTGACTGA

MCS3 AatII His 6X-Tag Tev-protease site cleavage EcoRI Sall XhoI NotI Stop codons
ATAATGAAGACGTCGCATCATCATCATCACGAAAACCTGTACTTCCAGGGCAAGAATTCGTCGACTGCAG
CGGCCCGCTGACTGACTGA