# pBin19

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| **Vector ID** | V010907 |
| **Antibiotic Resistance** | Kanamycin |
| **Length** | 11777 bp |
| **Vector Type** | Plant Vectors |
| **Host** | Plants |

## Product Information

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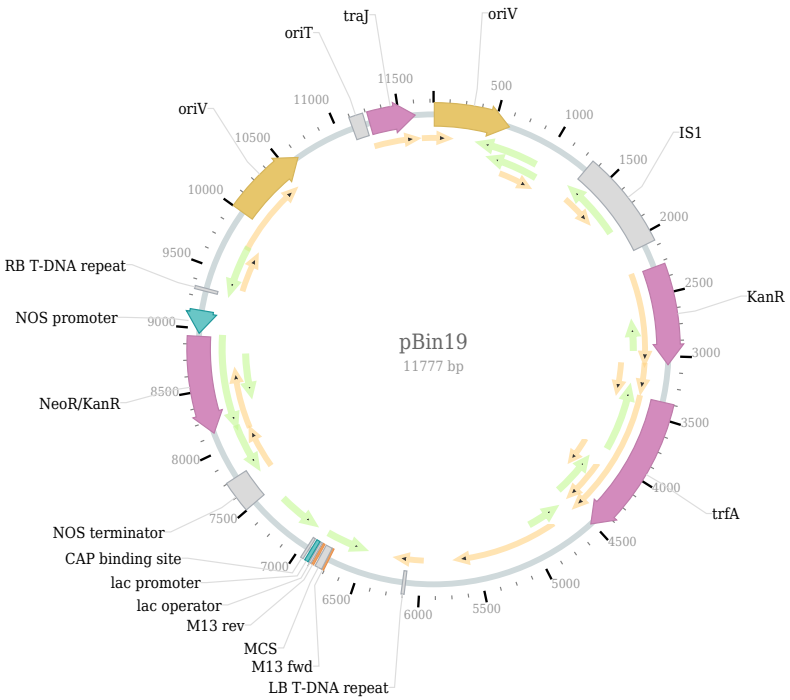
|---|---|
| **Replication Origin** | oriV |
| **Source/Author** | Bevan M. |
| **Selection Marker** | Neomycin/G418(Geneticin) |
| **Copy Number** | High copy number |
| **Promoter** | NOS |
| **5' Primer** | M13 fwd |
| **3' Primer** | M13 rev |
| **Comment** | pBin19 is a widely used binary vector for Agrobacterium-mediated plant transformation. It features left and right T-DNA borders flanking a cloning site and a kanamycin resistance gene (nptII) for selection in plants. The vector has an RK2 replication origin, allowing it to exist in 10-15 copies per Agrobacterium cell, which can enhance transformation efficiency. Its disarmed T-DNA region enables the insertion of foreign genes to create transgenic plants without causing crown gall disease. |

## 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 ℃.