Figure 1: SCV301A homologous recombination Cassette

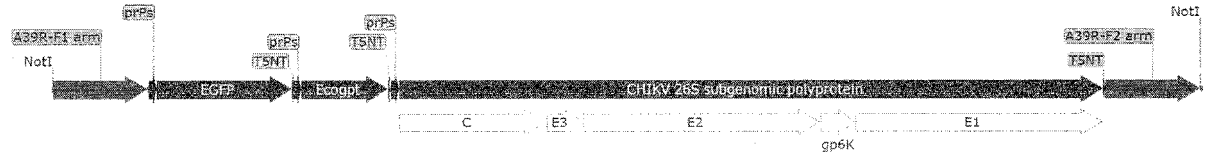


Figure 2: F1 and F2 target for homologous recombination in VACV-COP genome

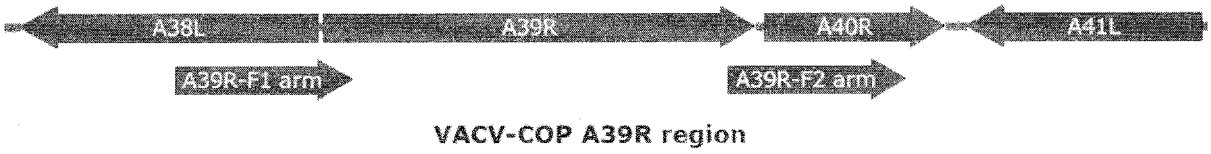


Figure 3: the CHIKV-26S insertion site of SCV301A

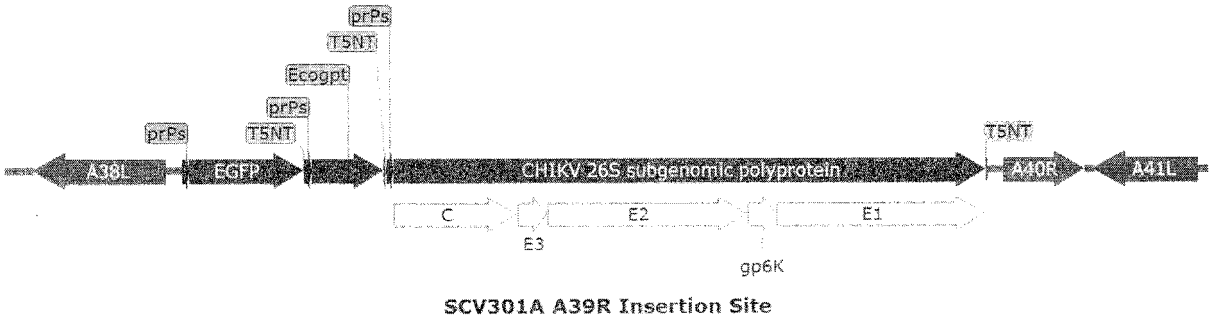


Figure 4: Deletion of Ecogpt and EGFP by Homologous Recombination

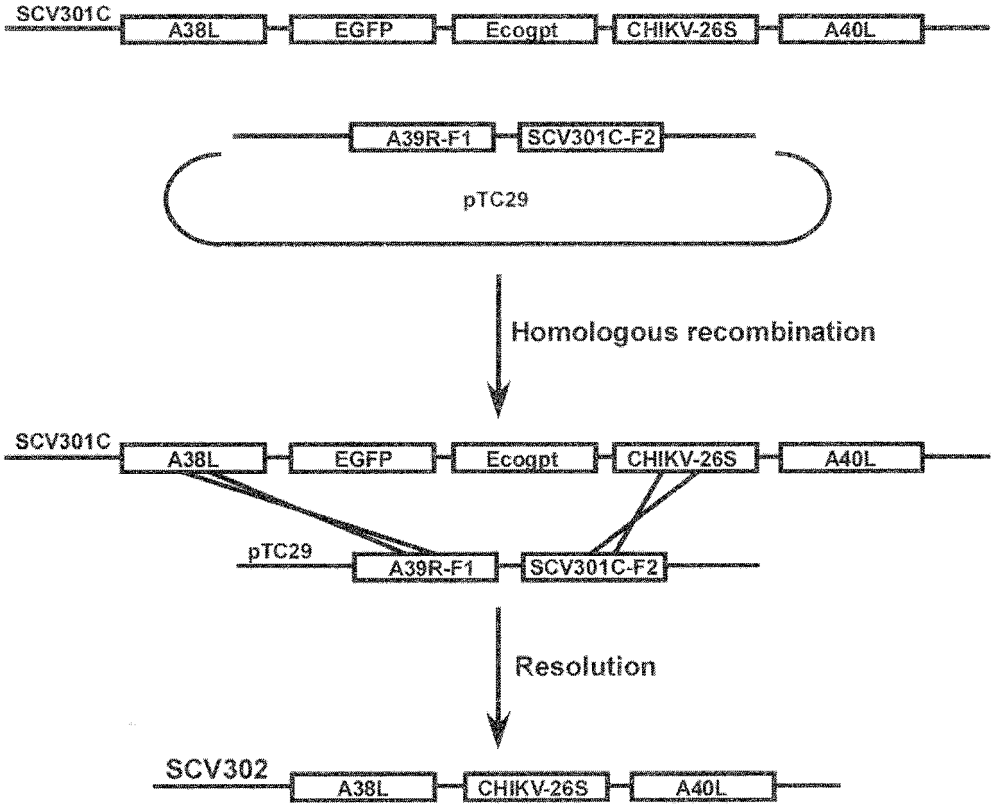


Figure 5: plasmid map of pTC29

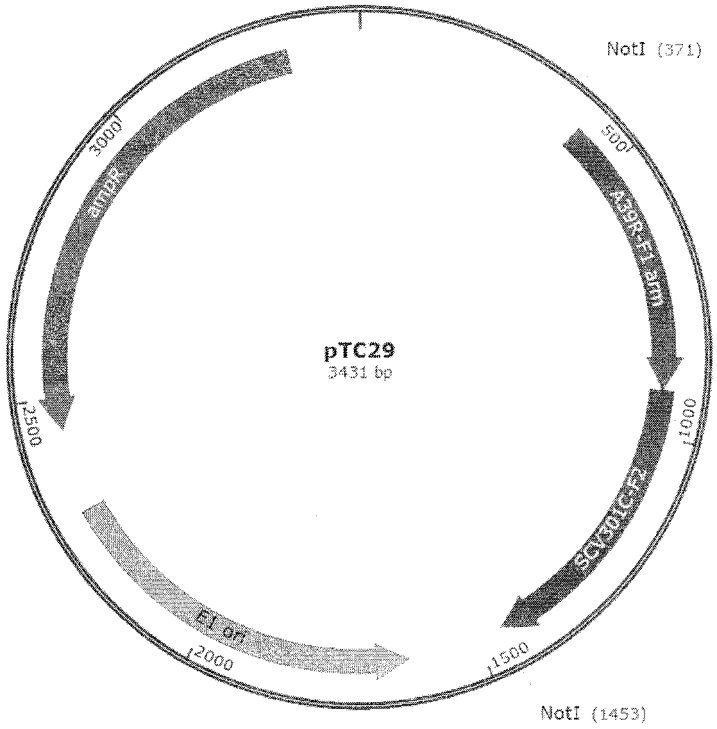


Figure 6: D13L Deletion HR Cassette

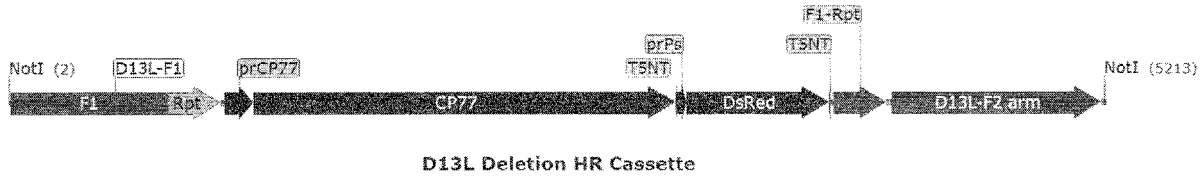


Figure 7: B7R-B8R Deletion HR Cassette

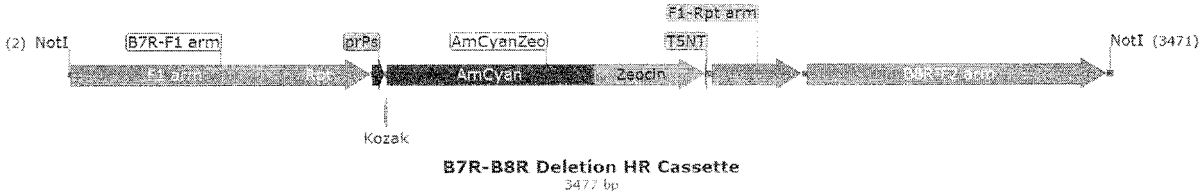


Figure 8

Method of action for homologous recombination with transdominant selection

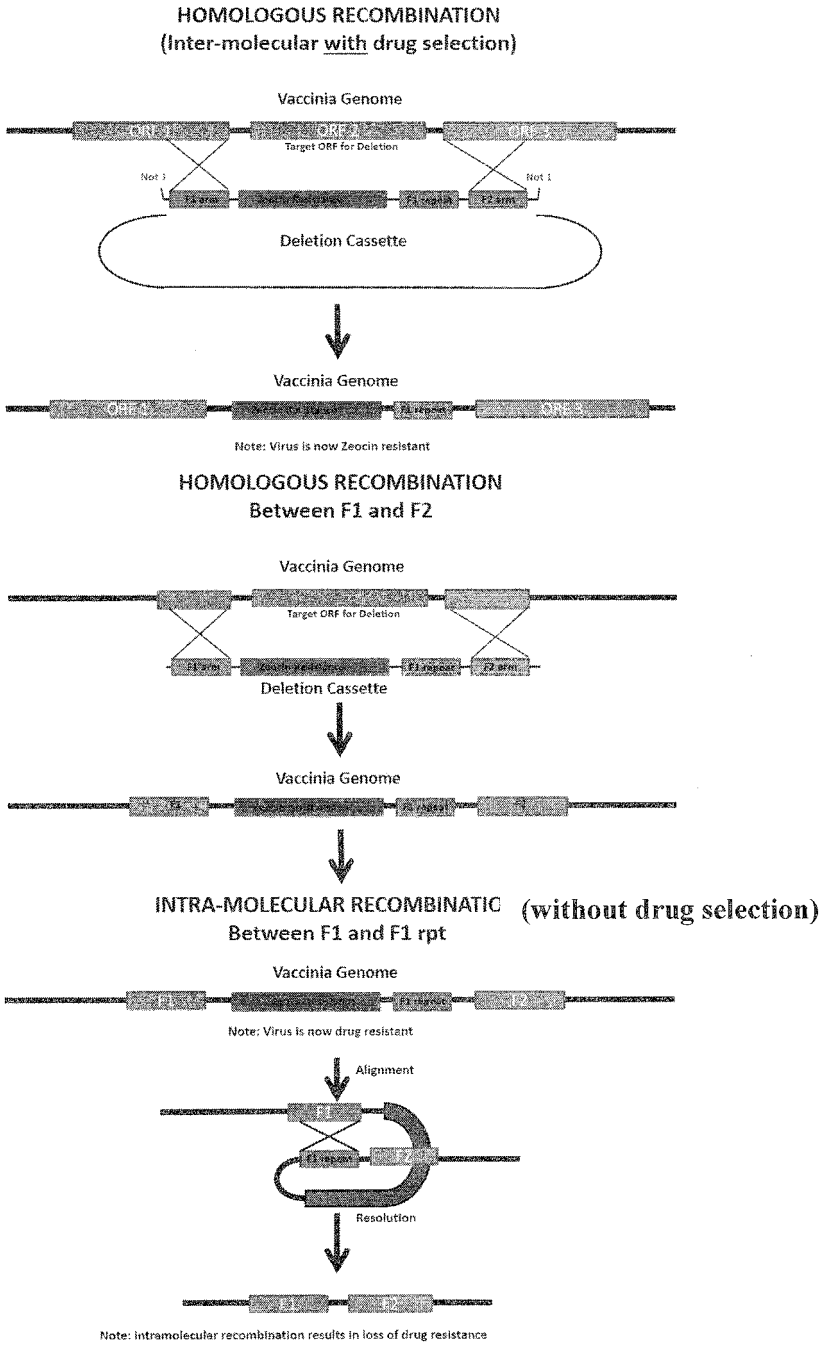


Figure 9: details of the ZIKV HR cassette

