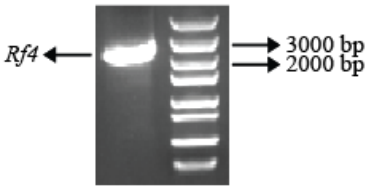
Figure S1 PCR amplification and sequencing of *Rf4* with F1/R1 in C48-2 and A619. (A) Electrophoresis analysis of F1/R1 PCR amplification. (B) Comparison of the genome sequence of *Rf4* between A619 and C48-2. The red letters indicated the sequence of primers F2/R2. The underlined regions are the amplifying fragment by primers F2/R2.

S1A



S1B

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A619     CTACACTACACACACATATACATGGGCAACGCAAGGCCACCTTTCTGAATCCTGCATGAGCGTGTACCACTAGAATTGTCAGTGTGTGCGGTGTATGGCA   100
Consensuctacactacacacatatacatgggcaacgcaaggccacctttctgaatcctgcatgagcgtgtaccactagaattgtcagtgtgtgcggtgtatggca

C48-2    GGTTTTTGGTTCGGCAAGTGGGGCCCTCCGGGGAGGAATCTCAGTAACAAACCGCTCTTCTGAAAAGGTCAGCCATCCCCGGTCCGGTCCGGTGATGTCG   200
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Consensuggtttttggttcggcaagtggggccctccggggaggaatctcagtaacaaaccgctcttctgaaaaggtcagccatccccggtccggtccggtgatgtcg

C48-2    TCGCTGTCGCTCTGCTAGCTTGCTGCCGATCGCGCCCCCCCGCCCCTTCTTCTCTCTACCCCTCCCTCCACCTCATAAATACTTAGTTTAATAACCTTGC   300
A619     TCGCTGTCGCTCTGCTAGCTTGCTGCCGATCGACACCCCCTCTCCCTTCTTCTCTCTACCCCTCCCTCCACCTCATAAATACTTAGTTTAATAACCTTGC   300
Consensutcgctgtcgctctgctagcttgctgccgatcc c ccccc c cccttcttctctctacccctccctccacctcataaatacttagtttaataaccttgc

C48-2    ACTGCCGCAGTAGCCCTTAACTGCTGCT....ATCTATCTCTTTTCTGAAGGAAAAAAAAGGTTTGATACTCCTCTACCTAGCTAGTCCTGCATGCCGCT   396
A619     ACTGCCGCAGTAGCCCTTAACTGCTGCTATATATCTATCTCTTTTCTGAAGGAAAAAAAAGGTTTGATACTCCTCTAGCTAGCTAGTCCTGCATGCCGCT   400
Consensuactgccgcagtagcccttaactgctgct    atctatctcttttctgaaggaaaaaaaaggtttgatactcctcta ctagctagtcctgcatgccgct

C48-2    AATGTGCGTCTTGCCTGTTTATTTGTTCTTAATAAGGGCTGCCTATCTATTATATTTTGCACCTGTTTTGCTGTGTTCTTGGTAACTAGCTTAATTCCTT   496
A619     AATGTTCGTCTTGCCTGTTTATTTGTTCTTAATAAGGGCTGCCTATCTATTATATTTTGCACCTGTTTTGCTGTGTTCTTGGTAACTAGCTTAATTCCTT   500
Consensuaatgt cgtcttgcctgtttatttgttcttaataagggctgcctatctattatattttgcacctgttttgctgtgttcttggtaactagcttaattcctt

C48-2    TGCCTACAATCGTCAAATCCCCCCCCATCATCAGTCAGATGAACTTTTGATCGAATTGAAGTTGTTCTTCTAATTCGGCCCCAGCAGCGCCCATGCATCTG   596
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C48-2    GTTTTATTTGCTTTCTGTTGGGTATAATATGCAAGACCTTTTGTTGCTAGGGCAAGGCTGCAACCACATGCGTGTACTGAACTCATGATGTAACTCATCC   696
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Consensugtttatttgctttctgttgggtataatatgcaagacctttgttgctagggcaaggctgcaaccacatgcgtgtactgaactcatgatgtaactcatcc

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C48-2    CGCACCTAACCGTCTCCGGCGTCGCCAGCATCCCGGCAGAGCTGAGCTTCCACCTGCTGCACTCGCTCGACGCCGCGGCGGCGGTCAATCCCGTCACGGC  1196
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C48-2    GCCGCCGCAGTCCACCATCGACTACTTCCTCGGCGGCGCCGATCCCCACCAGCAGGCCATGCAGTACGAGCCGCTGCCGCCCGCCGCGGGCGGCCACCAC  1296
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