

**TG579**, RFLP probe 1,200 kp, SGN, chr. 6, 73.00 cM

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Pirmers: TG579F1, GG TAGCTGGTTGTAACCACAATCC, (24 nt)

TG579R1, CATTGCTGGACAGTTAATTGACC, (23 nt)

Sequence from Heinz 1706: (775 bp)

ORIGIN

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1      GGTAGCTGGT  TGTAACCACA  ATCCTTTGGT  GCACGGGCTA  AATCATTGTA  ATGACATACC
61     TGGTTTGTCTG  TTTTCGCTTTT  GTGAAAGACA  AATAAGAGCA  TACCTTGATC  GGAATATTAG
121    CTATGGGTCC  TGAGGGTCTT  TTTTCTCTGT  CAAGAGGTGA  CCTCGAGAAT  CAATCTATGG
181    AAAATTTGTA  GTACTGGTGA  CTAATAAGCT  TCCTCTTTGC  CCAAATAAAT  CCGATGGGAT
241    CACTCAATAA  GTGAACCTTT  TGAGTGATT  ATAACACAAC  ACAACCACAT  TCAATCACTA
301    CTCGACGTAC  TATAATAGCT  GCCTTGGTTG  GAACATTGAG  TGTCCTAATG  TAGATACCTT
361    GGATAGTGAC  GACAATGACT  CTAATAAGTT  GAACTCAATG  AACTGTGTTA  AGAAAAACAT
421    GCAGTAGTTG  CATCTTAGAA  CTAACAAAAA  AAGCAAAAAG  CAGACACCAC  ACTCCACTAG
481    AATTGGCCAT  CCGTTTCATC  TTTTTTTTTT  GGGTGTGTGT  GTGGTCACTT  GCAGGCCAAT
541    ACACAACCTC  GAATAAAAAA  ATAGCAAGAG  AGAATGAATT  CATTTTTAAG  CATTGATAAG
601    GTAAAGACTA  CCTATACGAT  CACAAATCAT  ACAACTAAAC  AATATAGAAG  GCACCAGGAA
661    AACGACTAAT  CAATATATAA  ATTCAACGTT  AACTCAAAAT  TGATGTATGT  TAAAGATGAA
721    CATGTGGTGC  TAGTGAATCC  CAAGAAAACC  TTGGTCAATT  AACTGTCCAG  CAATG
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Partial Sequence from LA2779: (685 bp)

ORIGIN

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1      CCCCAGCAGCA  CCAGGNCTTG  TNCGNNGNGG  GGGNGNGGCN  ANMNTCANCN  TNCNNTTTTG
61     GTGCTGGGTG  NNANCCCCAN  TCCTTTGGNN  CCGGGCCMNA  ACCCCNNGTA  AGNCCNTCCN
121    GGGTTGGNNN  TTNNCCTTTN  GGGACGGCCA  ANNAGGGGNT  TTTCCNNGT  NNGGANNTTT
181    GGGNNGGGTT  TTTTTTTNGC  CAGGGGGGGC  CNCNNGGANC  CANTTTNGGG  AAANTTTTCG
241    NTCNNGGGNG  GGNNGGGNCC  CNCCANNAGG  GGACCNTTTN  GGGGGTTNCT  TACCCCANCC
301    CANCCCTTN  CANCCCTTCT  TNCCGGTCCA  NNANNNGNGC  CCTGGGTGGG  ACCTTNCCCN
361    NNNNCNTANN  NTGGAAAAGG  CNTTNAANG  TTNGAANNCA  NNGACNTNNN  TTTTAGGAAA
421    CCNNCCTTTT  TGGAANTACC  AAAAAAANCN  CAAGTNTGAN  ACCCCNNGAG  ANGGNCCCN
481    NNNTTTTCTT  TTTTTTTTTT  GGGGGTGTGT  GGTCACCTGC  AGGCCAATAC  ACAAATCCGA
541    ATAAAAACAT  AGCAAGAGAG  AATGAAATCA  TTATAAAGCA  TTGATAAGGT  AAAGACTACC
601    TATACGATCA  TAAATCATA  AANTAAACAA  TATAGAAGGC  ACCAGGAAAA  CGACTANTCA
661    ATNGGTAAAT  TCATACGTT  GCTCT
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Blast search (GenBank): No Match

SGN BAC clone Search: No match

Comparison with other Germplasm from Guatemala: Heinz 1706 = Gc9 = Gh13; not equal *S. chilense* LA2779 (indels and SNPs distinguish this accession from the *S. lycopersicum* sequences of Heinz 1706). LA1777 (*S. habrochaites*) PCR fragment did not sequence. Gc9 has begomovirus resistance derived from LA2779 and Gh13 has begomovirus resistance derived from *S. habrochaites*.