

TG292: RFLP Probe, SGN, Chr. 6, 64.00 cM

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University of Wisconsin-Madison: July 7, 2006

Primer Name	Sequence (5' to 3')
TG292F1	TTTTGTTGGGCCTTATTTATGCTG
TG292R2	GGGGTTGTTTGGTTCAAATACTAGTC

Heinz 1706 partial sequence_TG292F1: 699 bp:

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1   CCATTTGTTG ATAATATTCA GTTTTAATTA TATAGGGCTC ATGCCCTTTA NTATTTTCATG
61  ATCTTATGTT CCTCTGGATC TGAANCGNAA GAATGTATTA GACGTCAGAG GGAAC TTATG
121 TTTTGATTTCG GCATTAAATT CAATATTCAT GTCATCACT AAGGGGNCGT TTGTTTGATG
181 GTTGAATAAA TAAATTTCTG CATCAAATCC CACATAAGAT AATGTTGTAT AGGAAAAAAT
241 ATCACTGCAT GATTAATGCA ACATTTAGGT GTCGGTAATA AATAATAAAT GAATTAAGT
301 ATGCAGGAAT TGTGTTATTT TATTTGAGAT AGAATGTAGA ATAAGAACAT GATTCTTCCT
361 ACATGTAGAA AGCTCCAAGC CTTGTTGGAT AGAGTTACCT TGTACTTGTG TTGGTGGGGT
421 GGTAGTAGGT ACCCCATGAA ATCAGCCAAG GTGTGCACAA GCTGGTCCTA ACACCACAAT
481 TATAAAAATA AAAGAGAGTG GAATAAGAAC ACGTATTAAC AATGTGGGTA TGAAGCTACT
541 TAAAGAATAA CTATCCTTTT AAATAAGTAG TTGGACTATA AGNTACAAC ATCTCGTCAT
601 TATTCATCAA TGCATAATAA TCCCTTCATT ATTTATCGTT GCATTGACNA TCCTTGCANT
661 ANAATCCATT GATGACTAGT ATTTGAACCA AACAACCCC
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LA1777 partial sequence 292F1, Genbank Accession DQ855125, 694 bp:

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1   GTGATAATAT TCAGTTTTAA TTATATAGGG CTCATGNCCC TTTTATATATT TCATGATCTT
61  ATGTTCCCTCT GGATCTGAAG CGNAAGAATG TATTAGACGT CAGAGGGAAC TTATGTTTTG
121 ATTCGGCATT AAATTC AATA TTCATGCTCA TCACTANGAG GTCGTTTGTT TGATGGTTGA
181 AATAATAAAT TTCTGCATCA AATCCCACAT AAGGTAATGT TGTATAAGAA AAAATATCAC
241 TGCATGATTA ATGCAACATT TAGTTGTCAG TATTAAATAA TAATTGAATT AAAATATGCA
301 GGAATTGTGT TATTTTATTC GAGATAGAAT GTAGAATAAG AACATGATTC TTCCTACCTG
361 TAGAAAGCTC CAAGCCTTGT TGGATAGAGT TACCTTGAC TTGTGTTGGT GGGGTGGTAG
421 TAGGTACCAC ATGAAATCAG CCAAGGTGTG CACAAGCTGG TCCTAACACC ACAATTATAA
481 AAATAAAGA GTGTGGAATA TGAACACGTA TTAACAATGT GGGTATTAAG CTACTTAAAG
541 AATGAGTATC CTTTTAAATA AGTAGTTCAA CTATAAGTTA CAACTATCTC GTCATTATTA
601 ATCAATGCAT AACAATCCCT TCATTATTTA TCGTTGCATT GACAATCATT GCCTGTAAT
661 CGANTTATGA CTAGTATTTG AACCAAACAA CCCC
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Gh13 partial sequence_TG292F1: 698 bp:

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1   TATGTTGATA AATATTCAGT TTTAATTATA TAGGGCTCAT GACAAAGTTA TATTTTCATGA
61  TCTTATGTTT CTCTGGATCT GAAGAGGAAG AATGTATTAG ACGTCAGAGG GAACTTATGT
121 TTTGATTTCGG CATTAAATTC AATATTCATG CTCATCACTA AGGGGTCGTT TGTTTGATGG
181 TTGAAATAAT AAATTTCTGC ATCAAATCCC ACATAAGATA ATGTTGTATA GGAAAAAATA
241 TCACTGCATG ATTAATGCAA CATTTAGGTG TCGGTAATAA ATAATAATTG AATTAAGTA
301 TGCAGGAATT GTGTTATTTT ATTTGAGATA GAATGTAGAA TAAGAACATG ATTCTTCCTA
361 CATGTAGAAA GCTCCAAGCC TTGTTGGATA GAGTTACCTT GACTTGTGTG TGGTGGGGTG
421 GTAGTAGGTA CCCCATGAAA TCAGCCAAGG TGTGCACAAG CTGGTCCTAA CACCACAATT
481 ATAAAAATAA AAGAGAGTGG AATAAGAACA CGTATTAACA ATGTGGGTAT GAAGCTACTT
541 AAAGAATAAC TATCCTTTTA AATAAGTAGT TGGACTATAA GTTACAAC TA TCTCGTCATT
601 ATTCATCAAT GCATAATAAT CCCTTCATTA TTTATCGTTG CATTGACAAT CCTTGCCTA
661 TAATCCATTT ATGACTAGTA TTTGAACCAA AACAACCCC
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Gc171 complete sequence TG292F1-R2: 754 bp;

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1      TTTTGTGGG CTTATTTAT GCTGAAAAA GTTGCAAAGC GGATTTTGTA TGTTTTTATG
61     TTGATAAATA TTCAGTTTTA ATTATATAGG GCTCATGACA AAGTTATATT TCATGATCTT
121    ATGTTCTCTT GGATCTGAAG AGGAAGAATG TATTAGACGT CAGAGGGAAC TTATGTTTTG
181    ATTCGGCATT AAATTCAATA TTCATGCTCA TCACTAAGGG GTCGTTTGTT TGATGGTTGA
241    AATAATAAAT TTCTGCATCA AATCCACAT AAGATAATGT TGTATAGGAA AAAATATCAC
301    TGCATGATTA ATGCAACATT TAGGTGTCGG TAATAAATAA TAATTGAATT AAAGTATGCA
361    GGAATTGTGT TATTTTATTT GAGATAGAAT GTAGAATAAG AACATGATTC TTCCTACATG
421    TAGAAAGCTC CAAGCCTTGT TGGATAGAGT TACCTTGTTT TTGTGTTGGT GGGGTGGTAG
481    TAGGTACCCC ATGAAATCAG CCAAGGTGTG CACAAGCTGG TCCTAACACC ACAATTATAA
541    AAATAAAAGA GAGTGGAATA AGAACACGTA TTAACAATGT GGGTATGAAG CTACTTAAAG
601    AATAACTATC CTTTTAAATA AGTAGTTGGA CTATAAGTTA CAACTATCTC GTCATTATTC
661    ATCAATGCAT AATAATCCCT TCATTATTTA TCGTTGCATT GACAATCCTT GCACTATAAT
721    CCATTTATGA CTAGTATTTG AACCAAACAA CCCC
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Blast Search:

No Match

SGN BAC Clone Search:

No Match

Comparison With Germplasm From Guatemala:

Gh13=Gc171=Heinz ≠ LA1777 (At least 22 SNP)

Gc9, and LA2779 did not sequence. Therefore, there is no introgression associated with begomovirus resistance located at this locus on chromosome 6.