

RFLP probe: TG365, 50.0 cM, Chromosome 6

Christopher Martin and Douglas Maxwell

June 3, 2006, University of Wisconsin-Madison

Primers:

TG365F2, 5' GTCGTATTTTCACTGGATATGTTGTTG, 26

TG365R2, 5' CCCAAACTCTTCGCCAATTGTCTAAC, 26

SEQ Heinz 1706, primers: 365F2-R2, Genbank Accession DQ855126, 845 bp;

ORIGIN

```
1      GTCGTATTTT ACTGGATATG TTGTTGTTTG TTGATTTTCA ANGTATANGT ATGNNCATGG
61     AATCTGAGGG ATTTGCATTN NCAGCTTTCT GATGCGTTAG CTCGGAGGAG AAATATGACA
121    AGTGGTTGCA TCAGGCAAAG AACAGCTTAA AGAGTTTTTG GAACAAATTG CTAACCAAAG
181    CTTTGATTCC CGCCTTCAAA CCTTTTTTGA CATGTAAGTA ATAAAATATT ATCATCACAT
241    CTTTTGATCG ATTAGTTGTT CAATCAAATC AATTGATTTT TGTGAGGGAT TTAATGCAGG
301    GTTGATAAAG ATGCAGATGG TAGACTTACA GAAGAAGAAG TCAGAGAGGT ATTTGTGATT
361    CCATATATTT ATCTGTCTTA TCTAGTAAAT ACAATGATCT TTTGGGTGTG CGAATAAATT
421    TCCACATGAA AAGTTGAAAA AAACAAATAT ATCCTGGCAG ATTATTTGCC TAAGCGCATC
481    AGCTAACCAAG CTATCAAATA TCCAAAAACA AGCAGCAGAA TACGCAGCGT TGATCATGGA
541    AGAGTTGGAT CGCGAACGCA AAGGATACAT CATGGTTAGA CTAGTTTTAT TTCATGTTCA
601    ATGATCTCAA TTTGAAAATA AATATCGTTT TAACTATTTA TCATCTGATT CGATTTGACA
661    GCTTGAGAAC TTA AAAAATGC TTTTATTACA AGCTCCAATT CAATCAGATG GAGGAAAAGG
721    CTTGCATAGG AAATTAAGTC ATATGCTAAG CATGAAGCTT AAGCCAACAT TGGAGACTAA
781    TCCCATTA AA AGATGGTATA ACAATTTGAC GTACTTTTTG TTAGACAATT GGCGAAGAGT
841    TTGGG
```

SEQ Lal777, primer: 365F2: 791 bp;

ORIGIN

```
1      GGATTTGCAT TANAGCTTTT TGATGCGTTC CCCTNTGAGG AGAAATATAA CAAGTGTTG
61     CATCAGCAAA GAACCGNTTA AAGAGTTTTG GGAACAAATT GCTAACCAAA GCTTTGATTC
121    CCGCCTTCAA ACCTTTTTTG ACATGTAAGT AATAAAATAT TATCATCACA TCTTTTGATC
181    GATTAGTTGT TCAATCAAAT CAATTAATTT TTGGATTCTG ATTTTTGTGA GGGATTTAAT
241    GCAGGGTTGA TAAAGATGCT GATGGTAGAC TTACAGAAGA AGAAGTCAGA GAGGTATTTG
301    TGATTCCATA TATTTATCTT TCTTATCTAG TAAATACAAT GATCGTTTGG GTGTGCGAAT
361    AAATTTCCAC ATGAAAAGTT GAAAAACAA ATATATCCTG GCAGATTATT TGCCTAAGCG
421    CATCAGCTAA CAAGCTATCA AATATCCAAA AACAAGCAGT AGAATACGCA GCGTTGATCA
481    TGGAAGAGTT GGATCGCGAA CACAAAGGAT ACATCATGGT TAGACTAGTT TTATTTTCATG
541    TTCAATGATC TCAATTTGAA AATAAATATC GTTTCAACTA TTTATCATCT GATTCGATTT
601    GACAGCTGGA GAACTTAAAA ATGCTTTTAT TACAAGCTCC AATTCAATCA GATGGAGGAA
661    AAGGCTTGAA TAGNAACTTA AGTCATATGC TAAGNATGAA GCTTANGCCA ACATTGGAGA
721    CTAATCCCAT NAAAAGAATG GNTATAACAA TTTGACGTAC TTTTTGTTAG ACAATTGGCG
781    AAGAGTTTGG G
```

Blast Search (GenBank): AB198717, *Solanum tuberosum* StrobD mRNA for NADPH oxidase (appears to be three exons; 88-93% nt id)

REFERENCE:

AUTHORS Yamamizo, C., Kuchimura, K., Kobayashi, A., Katou, S.,
Kawakita, K., Jones, J.D., Doke, N. and Yoshioka, H.
TITLE Rewiring mitogen-activated protein kinase cascade by
positive feedback confers potato blight resistance
JOURNAL Plant Physiol. 140 (2), 681-692 (2006)

AF147783, *Solanum lycopersicum*, whitefly-induced gp91-phox (Wfil) gene (appears to be three exons)

AJ309006, *Nicotiana tabacum* mRNA for NADPH oxidase (rboh gene)

Blast search, SGN against, BAC sequences:

No matches with BAC from Chromosome 6.

Comparison with Guatemala tomato breeding lines: Heinz = Gh13 ≠ LA1777 (14 nt indel)