

MK000004=Q1/850Flanking

Marker: Q1/850Flanking

Type: Codominant

Description: *M. javanica* nematode resistance linked codominant marker. This is the SCAR derived from sequencing flanking regions of the RAPD marker, OP-Q01/850.

Reference: Josh

Primers: Q1-800 Rev-2 B5'-CCG CTT CTG CAA TCA GGT AGG C-3'
Q1-800 Rev-2L B RC5'-GAT TCA ATG AAA CTC AAG TCA TCC TTT TCG C-3'

PCR Reaction:

PCR Program:

Screening Method: Agarose Gel, size difference

Product Sizes: Susceptible: 759 b.p.

Resistant: 544 b.p.

Example:

Sequence Information: Susceptible sequence, 759 base pairs

>VC000348 Q1/800 Reverse 10BS from U:\jrhyman\Projects\Mj-1 marker saturation\Q1-800\Fwd-2 & Rev-2\Q1-800 fwd-2.bio [Link] bases 36..385 (1..35 was vector)

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AATTGGCATTTCATGTAGCGTTTTTCTGTTAAAACGCAATAGATCTAGTGTCTTCTATTGAAAATCAAAATGTTAGCTTATCTAGCATTAAATA
TATTGTATTTAGGATTTTTCTCTCAACTCTATTATTTTGTGATATTATTTGTGGTTTTTGTGACTCTGGACCTTTCTCCGGTTTACCTATATCA
TTTTGTTAAACAAGAAAATTACAACATATTATCTTTTATGTCATGTTAAACATATTTGCTATGGTAACGGGAAATGAAACAGATTGACT
AGCATTGCTGCCTTCTAAGCAAAAATTATTCATGATCCTCAAGGAGCATTAGCTCATGGAATATGATTCT :then sequence
continues with:
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>VC000355 Q1/800 Flanking, Susceptible 759 bp from U:\jrhyman\Projects\Mj-1 marker saturation\Q1-800\Size-polymorphism\SCAR Q1=800.doc

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CCGCTTCTGCAATCAGGTAGGCATTACTTGCAGCAAGCTGCCAAGCAGCACAAGAGCGAGAGCAGCTCCTTGTTTCAGGGTCATCAGATGAGAG
ATCTTCTCCAACTCCGAAAAATAGGTCAAGCGGGAGGCTAACTCGACTCACTCTCTCTATAAAAAAACCCCTCTCCAGAGGAGAGCAT
AAGCTCCAGGATGAGTATGTCTGGATTCCCGGATTCATTCTCTACTTGTGGTTTCATTTGTTACTAAAAACGGAACCAGCATAAACCTCAC
GTCCAAAGGTTTTGTGCGCTCTGTCTCGTGATATAGGAAACATGATTTTCTGAGTGATAGAGAAGTAGACCGTCTTTTCAGGCTTAAAGTTC
TAAGCT
TAGGACGAAATGCTTTGGAAGGAATATACCACATACCTTGGGACGAGTAAGATCCTGACTTCTGTTTCCAATATCTCATCACTGAATCTGA
ATGTCTTCAATTTGGCCAAATAATCAACTTCAAGTATACCATCAGACTTTGGATTGACCCATTGCAATTTGCAATCTGCAAAAAGATTTAGCTAT
CTGATAACAGATGAAGTGAACCATCCCTATATCACTTTCTAATGCTTCAAAACTCCAAGTTATGGACTTGCAAGTTCAACAGTTTACCAGATC
TCATACCTGAGATCTTGGATGGTTACTGTATCTTCAGAAATTAGGTCTGACAAATAATAATCTAGGATTTGGCGAAAAGGATGACTTGAGTTT
CATTGAATC
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:seq continues from:

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>JH003568 686bp U:\jrhyman\Projects\Mj-1 marker saturation\Q1-800\Size-polymorphism\6-23-
03\Simon-AlitaT6_11H.ab1
AATCACTAGTGCGCCCGCTGCAGGTCGACCATATGGGAGAGCTCCCAACGCGTTGGATGCATAGCTTGAGTATTCTAAGGGCCCCCTAAA
AAAA
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Resistant sequence, 544 base pairs

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CCGCTTCTGCAATCAGGTAGGCATTACTTGCAGCAAGCTGCCAAGCAGCACAAGAGAGTAACCAGCATAAACCTCACGTCCAAAGGTTTTGTT
GGCACTGTCTCGTGATATAGGAAACACGATTTTCCAGAAGTAGACCGTCTTTTCAGGCTTAAAGTTC TAAGCT
TACGGCAAAATGCTTTGGAAGGAATATACCAGATACCTTGGGACGAGTAAGATCCTGACTTCTGTTTCCAATATCTCATCACTGAATGTCTT
CAATTTGGCCAAATAATCAACTTCAAGTAAGTATACCATCAGACTTTGGATCAACCCATGGCAATTTGCAATCTGCAAAAAGATTCAGCTATCTG
ATAACAGATAAAGTGAACCATCCCTATATCACTTTCTAATGCTTCAAAACTCCAAGTTATGGACATGCAGTTCAACAGTTTACCAGTCTCA
TACCTGAGATCTTGGATAGTTACTGTATCTTCAGAAATTAGGTCTGACAAATAATAATTTAGGATTTGGCGAAAAGGATGACTTGAGTTTCAAT
TGAATC
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