

Table 1: Primer and probe data for the sequential real-time multiplex PCR assay

GenBank accession no.(<i>gene</i>)	Primer/probe ID	Primer/probe sequence (5' -3')	Probe dye	Probe special chemistry	Quencher (3')	nM
CR931632 (<i>wzy</i>)	1-F	TTTCATCCCTATGTGTGGTATAG				300
	1-R	GCTTTAGAAGGTAGAGTTAACAAC	FAM	LNA ^b	BHQ1	300
CR931633 (<i>wzy</i>)	1-Probe	TGCCAAAGCCAGCCAT				100
	2-F	TGTTATCCCATATAAGAACCGAGTGT				300
	2-R	AAAATTACCCAAAAGCTATCCAA	FAM	“T” ^d =BHQ1	BHQ1	300
CR931634 (<i>galU</i>)	2-Probe	TTGCAATT“T”CAATTTTTTTGCCCCAATCTC				200
	3-F	CCACTAAAGCTTTGGCAAAAAGAAA				300
	3-R	CCCGAACGTAAAGCTTCTTCA	HEX	“T” ^d =BHQ1	BHQ1	300
CR931635 (<i>wzy</i>)	3-Probe	TTGTAGACCGCCCCACAA“T”TCATTTTGT				200
	4-F	GCTTCTGCTGTAAGTGTGTGC				300
	4-R	CACCACCATAGTAACCAAAGTTCC	CY5		BHQ2	300
CR931637 (<i>wzy</i>)	4-Probe	TTCCACAAAAGAAGAGCCTACAGGTAACCCCA				100
	5-F	CATGATTTATGCCCTCTTGCAA				300
	5-R	GACAGTATAAGAAAAAGCAAGGGCTAA	HEX	“T” ^d =BHQ1	BHQ1	300
CR931639 (<i>wciP</i>)	5-Probe	TCTTCTTCTCA“T”CGTTTCCGCATGCTTTT				200
	6A/6B/6C/6D-F	GTTTGCCTAGAGTATGGGAAGG				200
	6A/6B/6C/6D-R	TAGCCTTTCTGAAAACATTTAGCG	FAM	“T” ^d =BHQ1	BHQ1	200
EF538714 (<i>wciN</i>)	6A/6B/6C/6D-Probe	TGTTCTGCC“T”GAGCAACTGGTCTTGATC				200
	6C/6D-F	TTGGGATGATTGGTCGTATTAG				200
	6C/6D-R	CTCTTCAATTAGTTCTTCAGTTCG	FAM	LNA ^b	BHQ1	200
CR931643 (<i>wzy</i>)	6C/6D-Probe	CCACGCAATTCGCCATC				100
	7F/7A-F	ATGAAGGCTTTGGTTTGACAGG				200
	7F/7A-R	ATTCTCGCCATCAATTGCATATTC	CY5		BHQ2	200
CR931648 (<i>wzx</i>)	7F/7A-Probe	ACACCACTATAGGCTGTTGAGACTAACGCACA				100
	9V/9A-F	AGGTATCCTATATACTGCTTTAGG				300
	9V/9A-R	CGAATCTGCCAATATCTGAAAG	HEX	LNA ^b	BHQ1	300
CR931653 (<i>wzy</i>)	9V/9A-Probe	ACA“CATTGACA”CCGCT				100
	11A/11D-F	AAATGGTTTGGATATGGTTTGTGG				300
	11A/11D-R	AGTGCTAACTGTAAAACCTTGATTATGAG	CY5		BHQ2	300
CR931660 (<i>wzx</i>)	11A/11D-Probe	ATTCCAACCTTCTCCAATTTCTGCCACGG				100
	12F/12A/12B/44/46-F	GCACCCACGGGTAAATATTCTAC				300
	12F/12A/12B/44/46-R	CAACTAAGAACCAAGGATCCACAG	CY5		BHQ2	300
	12F/12A/12B/44/46-Probe	TGCCACCAACACCAGGTCCAGGT				200

CR931662 (wzy)	14-F	AGAGTGTATGAGGAATCC	FAM	“T” ^d =BHQ1	BHQ1	300
	14-R	ATATATCTACTGTAGAGGGAAT				300
	14- Probe	CGCCAAGTAACA“T”TTCCATTCCATT				100
CR931663 (wzy)	15A/15F-F	AATTGCCTATAAACTCATTGAGATAG	FAM	LNA ^b	BHQ1	200
	15A/15F-R	CCATAGGAAGGAAATAGTATTTGTTC				200
	15A/15F- Probe	CCC <u>G</u> CA <u>A</u> ACTCT <u>G</u> TCCT				100
CR931668 (wzy)	16F-F	TAATGTTATGACCTTGGTAATCTTCCC	HEX	“T” ^d =BHQ1	BHQ1	300
	16F-R	TCCCAAAGGATAATCAATAACTTTTAGAAG				300
	16F- Probe	AGCCATAAGTCT“T”CCAAATGCTTAACCGCT				100
CR931673 (wzy)	18C/18A/18B//18F-F	TCGATGGCTAGAACAGATTTATGG	HEX		BHQ1	200
	18C/18A/18B//18F-R	CCATTGTCCTGTAAAGACCATTG				200
	18C/18A/18B//18F- Probe	AGGGAGTTGAATCAACCTATAATTTGCCCC				100
CR931675 (wzy)	19A-F	CGCCTAGTCTAAATACCA	FAM		BHQ1	200
	19A-R	GAGGTCAACTATAATAGTAAGAG				200
	19A- Probe	TATCAATGAGCCGATCCGTCCTT				100
CR931678 (wzy)	19F-F	TGAGGTTAAGATTGCTGATCG	CY5	LNA ^b	BHQ1	300
	19F-R	CACGAATGAGAACTCGAATAAAAG				300
	19F- Probe	CGC <u>A</u> CT <u>G</u> TCA <u>A</u> TTCACTTC				100
CR931682 (wcywV)	22F/22A-F	TCTATTAATAAACCATTGGAATTGAAACG	HEX	“T” ^d =BHQ1	BHQ1	200
	22F/22A-R	TCGCAATTGAAGACCACATAAACTG				200
	22F/22A- Probe	TCCGTAAT“T”CGCTTATGGGCACATTCTCCA				200
CR931683 (wzy)	23A-F	CTCCCCTCCATTACCCATTTGG	CY5	“T” ^d =BHQ2	BHQ2	200
	23A-R	TGAAGAAAGTGCTGTTTGTGAACC				200
	23A- Probe	AGCTAGAAC“T”CCCACACTCCCTACTCCCA				100
CR931685 (wzy)	23F-F	GACAGCAACGACAATAGTCATCTC	CY5	“T” ^d =BHQ2	BHQ2	300
	23F-R	TCCATCCCAACCTAACACACTTC				300
	23F- Probe	ATTGTGTCCA“T”AACCCCTTCGTCTGATTTCCAAAG				200
CR931702 (wzy)	33F/33A/37-F	GGAAGTGGTTCAGCAACTATACG	HEX	“T” ^d =BHQ1	BHQ1	200
	33F/33A/37-R	GGTTCTAAGACCGTCTGAAATACC				200
	33F/33A/37- Probe	CCCCAAATAGGAC“T”TTTCTGCCATGCCAAA				200

^aAbbreviations: FAM, 6-carboxyfluorescein; HEX, hexachloro-6-carboxyfluorescein; ROX, 6-carboxy-X-rhodamine; CY5, indodicarbocyanine; BHQ, black hole quencher; ID, identification; LNA, locked nucleic acid.

^bLocked nucleic acid nucleotides are underlined.

^d“T” black hole quencher placed internally on the thymidine, highlighted with a green background. Table adopted from Pimenta *et al* [40].