

902h TTTGCAAACCCCTAACAAATAGACTAAGCCCTTTAACTTGTTT . AAGAGATGTCAATTTA
59
G9c TTTGCAAACCCCTAACAAATAGACTAAGCCCTTTAACTTGTTT . AAGAGATGTCAATTTA
59
G2h TTTGCAAACCCCTAACAAATAGACTAAGCCCTTTAACTTGTTT . AAGAGATGTCAATTTA
59
HC7880 TTTGCAAACCCCTAACAAATAGACTAAGCCCTTTAACTTGTTTtAAGAGATGTCAATTTA
60
Cera TTTGCAAACCCCTAACAAATAGACTAAGCCCTTTAACTTGTTTtAAGAGATGTCAATTTA
60
G1h TTTGCAAACCCCTAACAAATAGACTAAGCCCTTTAACTTGTTTtAAGAGATGTCAATTTA
60
TY52 TTTGCAAACCCCTAACAAATAGACTAAGCCCTTTAACTTGTTTtAAGAGATGTCAATTTA
60
TY50 TTTGCAAACCCCTAACAAATAGACTAAGCCCTTTAACTTGTTTtAAGAGATGTCAATTTA
60
H24 TTTG**t**AAACCCCTAACAAATAGAC**aaa**CCCTT**c**AACTTGTTTtAAGAC**cat**GT**aa**ATTTA
60
hir 1353 TTTG**t**AAACCCCTAACAAATAGAC**aaa**CCCTT**c**AACTTGTTTtgAGAC**cat**GT**aa**ATTTA
60
hir 1928 TTTG**t**AAACCCCTAACAAATAGAC**aaa**atCCTT**c**AACTTGTTTtAAGAC**cat**GT**aa**ATTTA
60
hir 1223 TTTG**t**AAACCCCTAACAAATAGAC**aaa**CCCTT**c**AACTTGTTTtAAGAC**cat**GT**aa**ATTTA
60
Consensus tttg*aaacccttaacaaatagac*aa* cctt*aaacttgttt aga*atgt*aattta

902h TGTATTTATATTTACAAAATAAAATTTAATCACTATATACAACGTAATTTTCCGACAAA
119
G9c TGTATTTATATTTACAAAATAAAATTTAATCACTATATACAACGTAATTTTCCGACAAA
119
G2h TGTATTTATATTTACAAAATAAAATTTAATCACTATATACAACGTAATTTTCCGACAAA
119
HC7880 TGTATTTATATTTAtAAAATAAAATTTAATCACTATATACAACGTAATTTTCCGACAAA
120
Cera TGTATTTATATTTAtAAAATAAAATTTAATCACTATATACAACGTAATTTTCCGACAAA
120
G1h TGTATTTATATTTAtAAAATAAAATTTAATCACTATATACAACGTAATTTTCCGACAAA
120
TY52 TGTATTTATATTTAtAAAATAAAATTTAATCACTATATACAACGTAATTTTCCGACAAA
120
TY50 TGTATTTATATTTAtAAAATAAAATTTAATCACTATATACAACGTAATTTTCCGACAAA
120
H24 TGTATTTATATTTAtAAAATAAAATTTA**ac**CACTATATACAACGTAATTTTCCGAC**g**AA
120
hir 1353 TGTATTTATATTTAtAAAATAAAATTTA**ac**CACTATATACAACGTAATTTTCCGAC**g**AA
120
hir 1928 TGTATTTATATTTAtAAAATAAAATTTA**ac**CACTATATACAACGTAATTTTCCGAC**g**AA
120
hir 1223 TGTATTTATATTTAtAAAATAAAATTTA**ac**CACTATATACAACGTAATTTTCC**ac**AG**g**AA
120
Consensus tgtatTTatattta aaaactaaaatttaa*cactatatacaacgtaattttcc ac*aa

902h GGAGTGTCTG.....AGCCAAGGTAGGTCCTG
145
G9c GGAGTGTCTG.....AGCCAAGGTAGGTCCTG
145

G2h	GGAGTGTCTG.....AGCCAAGGTAGGTCCTG
145	
HC7880	GGAGTGTCTG.....AGCCAAGGTAGGTCCTG
146	
Cera	GGAGTGTCTG.....AGCCAAGGTAGGTCCTG
146	
G1h	GGAGTGTCTG.....AGCCAAGGTAGGTCCTG
146	
TY52	GGAGTGTCTG.....AGCCAAGGTAGGTCCTG
146	
TY50	GGAGTGTCTG.....AGCCAAGGTAGGTCCTG
146	
H24	GGAGTGTCTG ctcgcacacccttgga CCAAGGTAGGTCCT c
160	
hir 1353	GGgGTGTCTG ctcgcacacccttgga CCAAGGTAGGTCCT c
160	
hir 1928	GGgGTGTCTG ctcgcacacccttgga CCAAGGTAGGTCCT c
159	
hir 1223	GGAGTGTCTG ctcgcacacccttgga CCAAGGTAGGTCCT c
159	
Consensus	gg*gtgtcg*****ccaaggtaggtcct*

Figure 2. Sequence from PCR fragments amplified with primer pair P105s/P105c from tomato breeding lines and three wild species accessions of *hir* = *S. habrochaites* (*L. hirsutum*) (Amer. J. Botany 88:1888-1902). 902h, breeding line with resistance to TYLCV (Phytopathology 88:910-914) with resistance derived from *S. habrochaites*; G9c line selected in Guatemala from Fla 595-2 with resistance to TYLCV and ToMoV from *S. chilense* (J. Scott); Gh2h line selected from hybrid FAVI 12 (begomovirus resisted derived from 902h); HC7880, open pollinated cultivar from Cuba susceptible to begomoviruses in Guatemala; Cera, *S. lycopersicum* var. *cerasiforme* collected in Sanarate, Guatemala, susceptible to begomoviruses; G1h, line selected from hybrid FAVI 9 (begomovirus resistance derived from 902h); TY52, isolines with *Ty-1* gene from *S. chilense* (Zamir et al. TAG 88:141-146); TY50, isolate to TY52 without *Ty-1* gene for TYLCV resistance; H24, line with *Ty-2* gene introgressed from a *S. habrochaites* into chromosome 11 in the region of the TG105 marker (Hanson et al. J. Amer. Soc. Hort. Sci. 125:15-20).