

Figure S2 Alignment of the coding sequences of *MYB25-like*. Genome-specific single nucleotide polymorphisms (SNPs) are highlighted in pink, the At or Dt sub-genome SNPs among TM-1, Sicala 40 and Pima S-7 are shown in red, SNPs between the At and A2 genome are shown in green, and SNPs between the Dt and D5 genome are shown in blue. Codons with SNPs that changed amino acids are underlined. In *MYB25-like_Dt*, three nucleotides (positions 76, 419, and 965) differ between Pima S-7 and TM-1. Position 76 SNP does not change amino acid.

(A) MYB25-like

Cotton A 06163	ATGCAGCAGTCTCCATGTAGCGACAAGGTGGGGTTGAAGAAAGGGCCATGGACTCCAGAA	60
Gh_A12G1503/Pima S-7	ATGCAGCAGTCTCCATGTAGCGACAAGGTGGGGTTGAAGAAAGGGCCATGGACTCCAGAA	60
Gh_A12G1503/TM-1	ATGCAGCAGTCTCCATGTAGCGACAAGGTGGGGTTGAAGAAAGGGCCATGGACTCCAGAA	60
Gh_A12G1503/Sicala 40	ATGCAGCAGTCTCCATGTAGCGACAAGGTGGGGTTGAAGAAAGGGCCATGGACTCCAGAA	60
Gorai.008G179600	ATGCAGCAGTCTCCATGTAGCGACAAGGTGGGGTTGAAGAAAGGGCCATGGACTCCAGAA	60
Gh_D12G1628/Pima S-7	ATGCAGCAGTCTCCATGTAGCGACAAGGTGGTGTGTTGAAGAAAGGGCCATGGACTCCAGAA	60
Gh_D12G1628/TM-1	ATGCAGCAGTCTCCATGTAGCGACAAGGTGGTGTGTTGAAGAAAGGGCCATGGACTCCAGAA	60
Gh_D12G1628/Sicala 40	ATGCAGCAGTCTCCATGTAGCGACAAGGTGGTGTGTTGAAGAAAGGGCCATGGACTCCAGAA	60

D12_47603353, KASP marker for the MYB25-like_Dt allele

Cotton A 06163	GAAGACCAAAAACCTCTTGTCTTATATTC AAGAACACGGCGGTGGAAGCTGGCGAGGCTTG	120
Gh_A12G1503/Pima S-7	GAAGACCAAAAACCTCTTGTCTTATATTC AAGAACACGGCGGTGGAAGCTGGCGAGGCTTG	120
Gh_A12G1503/TM-1	GAAGACCAAAAACCTCTTGTCTTATATTC AAGAACACGGCGGTGGAAGCTGGCGAGGCTTG	120
Gh_A12G1503/Sicala 40	GAAGACCAAAAACCTCTTGTCTTATATTC AAGAACACGGCGGTGGAAGCTGGCGAGGCTTG	120
Gorai.008G179600	GAAGACCAAAAACCTCTTGTCTTATATTC AAGAACACGGCGGTGGAAGCTGGCGAGGCTTG	120
Gh_D12G1628/Pima S-7	GAAGACCAAAAACCTCTTGTCTTATATTC AAGAACACGGCGGTGGAAGCTGGCGAGGCTTG	120
Gh_D12G1628/TM-1	GAAGACCAAAAACCTCTTGTCTTATATTC AAGAACACGGCGGTGGAAGCTGGCGAGGCTTG	120
Gh_D12G1628/Sicala 40	GAAGACCAAAAACCTCTTGTCTTATATTC AAGAACACGGCGGTGGAAGCTGGCGAGGCTTG	120

Cotton A 06163	CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACTAC	180
Gh_A12G1503/Pima S-7	CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACTAC	180
Gh_A12G1503/TM-1	CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACTAC	180
Gh_A12G1503/Sicala 40	CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACTAC	180
Gorai.008G179600	CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACTAC	180
Gh_D12G1628/Pima S-7	CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACTAC	180
Gh_D12G1628/TM-1	CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACTAC	180
Gh_D12G1628/Sicala 40	CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACTAC	180

Cotton A 06163	TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA	240
Gh_A12G1503/Pima S-7	TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA	240
Gh_A12G1503/TM-1	TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA	240
Gh_A12G1503/Sicala 40	TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA	240
Gorai.008G179600	TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA	240
Gh_D12G1628/Pima S-7	TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA	240
Gh_D12G1628/TM-1	TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA	240
Gh_D12G1628/Sicala 40	TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA	240

Cotton A 06163	CTCCAATGCCCTTCTTGGAAACAGGTGGTTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA	300
Gh_A12G1503/Pima S-7	CTCCAATGCCCTTCTTGGAAACAGGTGGTTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA	300
Gh_A12G1503/TM-1	CTCCAATGCCCTTCTTGGAAACAGGTGGTTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA	300
Gh_A12G1503/Sicala 40	CTCCAATGCCCTTCTTGGAAACAGGTGGTTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA	300
Gorai.008G179600	CTCCAATGCCCTTCTTGGAAACAGGTGGTTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA	300
Gh_D12G1628/Pima S-7	CTCCAATGCCCTTCTTGGAAACAGGTGGTTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA	300
Gh_D12G1628/TM-1	CTCCAATGCCCTTCTTGGAAACAGGTGGTTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA	300
Gh_D12G1628/Sicala 40	CTCCAATGCCCTTCTTGGAAACAGGTGGTTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA	300

Position 314, T in Xu142fl, KASP marker for MYB25-like_At of Xu142fl

Cotton A 06163	GACAATGAGATCAAGAACTACTGGAATACACAGTTGAAGAAAAGGTTGACGACGATAGGG	360
Gh_A12G1503/Pima S-7	GACAATGAGATCAAGAACTACTGGAATACACAGTTGAAGAAAAGGTTGACGACGATAGGG	360
Gh_A12G1503/TM-1	GACAATGAGATCAAGAACTACTGGAATACACAGTTGAAGAAAAGGTTGACGACGATAGGG	360
Gh_A12G1503/Sicala 40	GACAATGAGATCAAGAACTACTGGAATACACAGTTGAAGAAAAGGTTGACGACGATAGGG	360
Gorai.008G179600	GACAATGAGATCAAGAACTACTGGAATACACAGTTGAAGAAAAGGTTGACCAAGATAGGG	360
Gh_D12G1628/Pima S-7	GACAATGAGATCAAGAACTACTGGAATACACAGTTGAAGAAAAGGTTGACCAAGATAGGG	360
Gh_D12G1628/TM-1	GACAATGAGATCAAGAACTACTGGAATACACAGTTGAAGAAAAGGTTGACCAAGATAGGG	360
Gh_D12G1628/Sicala 40	GACAATGAGATCAAGAACTACTGGAATACACAGTTGAAGAAAAGGTTGACCAAGATAGGG	360

08g179600DtF5
& MYB25L_F

Cotton_A_06163 ATCGACCCTGCAACTCACAGGCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGCC 420
Gh_A12G1503/Pima S-7 ATCGACCCTGCAACTCACAGGCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGCC 420
Gh_A12G1503/TM-1 ATCGACCCTGCAACTCACAGGCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGCC 420
Gh_A12G1503/Sicala 40 ATCGACCCTGCAACTCACAGGCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGCC 420
Gorai.008G179600 ATCGACCCTGCAACTCACAGGCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGCC 420
Gh_D12G1628/Pima S-7 ATCGACCCTGCAACTCACAGGCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGCC 420
Gh_D12G1628/TM-1 ATCGACCCTGCAACTCACAGGCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGCC 420
Gh_D12G1628/Sicala 40 ATCGACCCTGCAACTCACAGGCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGCC 420

08g179600_R2

Cotton_A_06163 GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGCTCGGTTAGAAGCTGAAGCTAGATTG 480
Gh_A12G1503/Pima S-7 GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGCTCGGTTAGAAGCTGAAGCTAGATTG 480
Gh_A12G1503/TM-1 GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGCTCGGTTAGAAGCTGAAGCTAGATTG 480
Gh_A12G1503/Sicala 40 GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGCTCGGTTAGAAGCTGAAGCTAGATTG 480
Gorai.008G179600 GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGCTCGGTTAGAAGCTGAAGCTAGATTG 480
Gh_D12G1628/Pima S-7 GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGCTCGGTTAGAAGCTGAAGCTAGATTG 480
Gh_D12G1628/TM-1 GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGCTCGGTTAGAAGCTGAAGCTAGATTG 480
Gh_D12G1628/Sicala 40 GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGCTCGGTTAGAAGCTGAAGCTAGATTG 480

Cotton_A_06163 GTGAGAGAGTCGAAACGAGTTTCAAACCCCTCCGCAAACCAATTTAGGTTACAGTCTTCA 540
Gh_A12G1503/Pima S-7 GTGAGAGAGTCGAAACGAGTTTCAAACCCCTCCGCAAACCAATTTAGGTTACAGTCTTCA 540
Gh_A12G1503/TM-1 GTGAGAGAGTCGAAACGAGTTTCAAACCCCTCCGCAAACCAATTTAGGTTACAGTCTTCA 540
Gh_A12G1503/Sicala 40 GTGAGAGAGTCGAAACGAGTTTCAAACCCCTCCGCAAACCAATTTAGGTTACAGTCTTCA 540
Gorai.008G179600 GTGAGAGAGTCGAAACGAGTTTCAAACCCCTCCGCAAACCAATTTAGGTTACAGTCTTCA 540
Gh_D12G1628/Pima S-7 GTGAGAGAGTCGAAACGAGTTTCAAACCCCTCCGCAAACCAATTTAGGTTACAGTCTTCA 540
Gh_D12G1628/TM-1 GTGAGAGAGTCGAAACGAGTTTCAAACCCCTCCGCAAACCAATTTAGGTTACAGTCTTCA 540
Gh_D12G1628/Sicala 40 GTGAGAGAGTCGAAACGAGTTTCAAACCCCTCCGCAAACCAATTTAGGTTACAGTCTTCA 540

Cotton_A_06163 TCGGCTCCTCCACTGGTAAAGCAAATTTGATGTTGGTTGGCTCATGCTACTAAACCGCAA 600
Gh_A12G1503/Pima S-7 TCGGCTCCTCCACTGGTAAAGCAAATTTGATGTTGGTTGGCTCATGCTACTAAACCGCAA 600
Gh_A12G1503/TM-1 TCGGCTCCTCCACTGGTAAAGCAAATTTGATGTTGGTTGGCTCATGCTACTAAACCGCAA 600
Gh_A12G1503/Sicala 40 TCGGCTCCTCCACTGGTAAAGCAAATTTGATGTTGGTTGGCTCATGCTACTAAACCGCAA 600
Gorai.008G179600 TCGGCTCCTCCACTGGTAAAGCAAATTTGATGTTGGTTGGCTCATGCTACTAAACCGCAA 600
Gh_D12G1628/Pima S-7 TCGGCTCCTCCACTGGTAAAGCAAATTTGATGTTGGTTGGCTCATGCTACTAAACCGCAA 600
Gh_D12G1628/TM-1 TCGGCTCCTCCACTGGTAAAGCAAATTTGATGTTGGTTGGCTCATGCTACTAAACCGCAA 600
Gh_D12G1628/Sicala 40 TCGGCTCCTCCACTGGTAAAGCAAATTTGATGTTGGTTGGCTCATGCTACTAAACCGCAA 600

Cotton_A_06163 TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
Gh_A12G1503/Pima S-7 TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
Gh_A12G1503/TM-1 TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
Gh_A12G1503/Sicala 40 TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
Gorai.008G179600 TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
Gh_D12G1628/Pima S-7 TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
Gh_D12G1628/TM-1 TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
Gh_D12G1628/Sicala 40 TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660

Cotton_A_06163 GACAACCTCCAATCTCCAACATCGACGTCGAGCTTCACGGAAAAACAAGTTACCAATCTCA 720
Gh_A12G1503/Pima S-7 GACAACCTCCAATCTCCAACATCGACGTCGAGCTTCACGGAAAAACAAGTTACCAATCTCA 720
Gh_A12G1503/TM-1 GACAACCTCCAATCTCCAACATCGACGTCGAGCTTCACGGAAAAACAAGTTACCAATCTCA 720
Gh_A12G1503/Sicala 40 GACAACCTCCAATCTCCAACATCGACGTCGAGCTTCACGGAAAAACAAGTTACCAATCTCA 720
Gorai.008G179600 GACAACCTCCAATCTCCAACATCGACGTCGAGCTTCACGGAAAAACAAGTTACCAATCTCA 720
Gh_D12G1628/Pima S-7 GACAACCTCCAATCTCCAACATCGACGTCGAGCTTCACGGAAAAACAAGTTACCAATCTCA 720
Gh_D12G1628/TM-1 GACAACCTCCAATCTCCAACATCGACGTCGAGCTTCACGGAAAAACAAGTTACCAATCTCA 720
Gh_D12G1628/Sicala 40 GACAACCTCCAATCTCCAACATCGACGTCGAGCTTCACGGAAAAACAAGTTACCAATCTCA 720

Cotton_A_06163 TCTGTCCGTTTCATTGACAGCTTTGTGGGAACTCAAATAACAGCTGTTGCGGAAATAAT 780
Gh_A12G1503/Pima S-7 TCTGTCCGTTTCATTGACAGCTTTGTGGGAACTCAAATAACAGCTGTTGCGGAAATAAT 780
Gh_A12G1503/TM-1 TCTGTCCGTTTCATTGACAGCTTTGTGGGAACTCAAATAACAGCTGTTGCGGAAATAAT 780
Gh_A12G1503/Sicala 40 TCTGTCCGTTTCATTGACAGCTTTGTGGGAACTCAAATAACAGCTGTTGCGGAAATAAT 780
Gorai.008G179600 TCTGTCCGTTTCATTGACAGCTTTGTGGGAACTCAAATAACAGCTGTTGCGGAAATAAT 780
Gh_D12G1628/Pima S-7 TCTGTCCGTTTCATTGACAGCTTTGTGGGAACTCAAATAACAGCTGTTGCGGAAATAAT 780
Gh_D12G1628/TM-1 TCTGTCCGTTTCATTGACAGCTTTGTGGGAACTCAAATAACAGCTGTTGCGGAAATAAT 780
Gh_D12G1628/Sicala 40 TCTGTCCGTTTCATTGACAGCTTTGTGGGAACTCAAATAACAGCTGTTGCGGAAATAAT 780

Cotton_A_06163 TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGACTTACAGGAAAGATTGGATAACTCA 840
Gh_A12G1503/Pima S-7 TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGACTTACAGGAAAGATTGGATAACTCA 840
Gh_A12G1503/TM-1 TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGACTTACAGGAAAGATTGGATAACTCA 840
Gh_A12G1503/Sicala 40 TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGACTTACAGGAAAGATTGGATAACTCA 840
Gorai.008G179600 TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGACTTACAGGAAAGATTGGATAACTCA 840
Gh_D12G1628/Pima S-7 TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGACTTACAGGAAAGATTGGATAACTCA 840
Gh_D12G1628/TM-1 TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGACTTACAGGAAAGATTGGATAACTCA 840
Gh_D12G1628/Sicala 40 TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGACTTACAGGAAAGATTGGATAACTCA 840

Cotton_A_06163 ATGGGGTTGCATGACATATTGGATCTCTCCTCAGAAGATGTATGGTTTCAAGGCTCATA 900
Gh_A12G1503/Pima S-7 ATGGGGTTGCATGACATATTGGATCTCTCCTCAGAAGATGTATGGTTTCAAGGCTCATA 900
Gh_A12G1503/TM-1 ATGGGGTTGCATGACATATTGGATCTCTCCTCAGAAGATGTATGGTTTCAAGGCTCATA 900
Gh_A12G1503/Sicala 40 ATGGGGTTGCATGACATATTGGATCTCTCCTCAGAAGATGTATGGTTTCAAGGCTCATA 900
Gorai.008G179600 ATGGGGTTGCATGACATATTGGATTTCTCCTCAGACGATGTATGGTTTCAAGGCTCATA 900
Gh_D12G1628/Pima S-7 ATGGGGTTGCATGACATATTGGATTTCTCCTCAGAAGATGTATGGTTTCAAGGCTCATA 900
Gh_D12G1628/TM-1 ATGGGGTTGCATGACATATTGGATTTCTCCTCAGAAGATGTATGGTTTCAAGGCTCATA 900
Gh_D12G1628/Sicala 40 ATGGGGTTGCATGACATATTGGATTTCTCCTCAGAAGATGTATGGTTTCAAGGCTCATA 900

Cotton_A_06163 AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960
Gh_A12G1503/Pima S-7 AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960
Gh_A12G1503/TM-1 AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960
Gh_A12G1503/Sicala 40 AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960
Gorai.008G179600 AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960
Gh_D12G1628/Pima S-7 AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960
Gh_D12G1628/TM-1 AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960
Gh_D12G1628/Sicala 40 AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960

Cotton_A_06163 CATCCGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
Gh_A12G1503/Pima S-7 CATCCGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
Gh_A12G1503/TM-1 CATCCGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
Gh_A12G1503/Sicala 40 CATCCGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
Gorai.008G179600 CATCCGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
Gh_D12G1628/Pima S-7 CATCCGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
Gh_D12G1628/TM-1 CATCCGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
Gh_D12G1628/Sicala 40 CATCCGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020

Cotton_A_06163 AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTTGCGAATGCTTCC 1080
Gh_A12G1503/Pima S-7 AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTTGCGAATGCTTCC 1080
Gh_A12G1503/TM-1 AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTTGCGAATGCTTCC 1080
Gh_A12G1503/Sicala 40 AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTTGCGAATGCTTCC 1080
Gorai.008G179600 AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTTGCGAATGCTTCC 1080
Gh_D12G1628/Pima S-7 AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTTGCGAATGCTTCC 1080
Gh_D12G1628/TM-1 AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTTGCGAATGCTTCC 1080
Gh_D12G1628/Sicala 40 AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTTGCGAATGCTTCC 1080

Cotton_A_06163 CCTTCTGGTTCTTCTGTCTTTTGA 1104
Gh_A12G1503/Pima S-7 CCTTCTGGTTCTTCTGTCTTTTGA 1104
Gh_A12G1503/TM-1 CCTTCTGGTTCTTCTGTCTTTTGA 1104
Gh_A12G1503/Sicala 40 CCTTCTGGTTCTTCTGTCTTTTGA 1104
Gorai.008G179600 CCTTCTGGTTCTTCTGTCTTTTGA 1104
Gh_D12G1628/Pima S-7 CCTTCTGGTTCTTCTGTCTTTTGA 1104
Gh_D12G1628/TM-1 CCTTCTGGTTCTTCTGTCTTTTGA 1104
Gh_D12G1628/Sicala 40 CCTTCTGGTTCTTCTGTCTTTTGA 1104
**

(B)MYB25-like of Xu142 and Xu142fl (the SNP in MYB25-like_At of Xu142 and Xu142fl is highlighted in pink)

```
Xu142_MYB25-like_Dt      ATGCAGCAGTCTCCATGTAGCGACAAGGTGGGGTTGAAGAAAGGCCATGGACTCCAGAA 60
Xu142fl_MYB25-like_Dt   ATGCAGCAGTCTCCATGTAGCGACAAGGTGGGGTTGAAGAAAGGCCATGGACTCCAGAA 60
Xu142_MYB25-like_At     ATGCAGCAGTCTCCATGTAGCGACAAGGTGGGGTTGAAGAAAGGCCATGGACTCCAGAA 60
Xu142fl_MYB25-like_At   ATGCAGCAGTCTCCATGTAGCGACAAGGTGGGGTTGAAGAAAGGCCATGGACTCCAGAA 60
*****

Xu142_MYB25-like_Dt      GAAGACCAAAAACCTCTGTCTTATATTCAAGAACACGGCGGTGGAAGCTGGCGCGGCTTG 120
Xu142fl_MYB25-like_Dt   GAAGACCAAAAACCTCTGTCTTATATTCAAGAACACGGCGGTGGAAGCTGGCGCGGCTTG 120
Xu142_MYB25-like_At     GAAGACCAAAAACCTCTGTCTTATATTCAAGAACACGGCGGTGGAAGCTGGCGAGGCTTG 120
Xu142fl_MYB25-like_At   GAAGACCAAAAACCTCTGTCTTATATTCAAGAACACGGCGGTGGAAGCTGGCGAGGCTTG 120
*****

Xu142_MYB25-like_Dt      CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACACTAC 180
Xu142fl_MYB25-like_Dt   CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACACTAC 180
Xu142_MYB25-like_At     CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACACTAC 180
Xu142fl_MYB25-like_At   CCCGCAAAGCTGGACTTCAAAGATGTGGCAAGAGTTGTAGACTTAGGTGGATTAACACTAC 180
*****

Xu142_MYB25-like_Dt      TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA 240
Xu142fl_MYB25-like_Dt   TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA 240
Xu142_MYB25-like_At     TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA 240
Xu142fl_MYB25-like_At   TTAAGACCAGATATCAAAGAGGAAAGTTCAGTTCGCAGGAAGAACGAACCATCATTCAA 240
*****

Xu142_MYB25-like_Dt      CTCCATGCCCTTCTTGAAACAGGTGGTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA 300
Xu142fl_MYB25-like_Dt   CTCCATGCCCTTCTTGAAACAGGTGGTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA 300
Xu142_MYB25-like_At     CTCCATGCCCTTCTTGAAACAGGTGGTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA 300
Xu142fl_MYB25-like_At   CTCCATGCCCTTCTTGAAACAGGTGGTCGGCTATTGCGGCTCATTTGCCAAAAAGAACA 300
*****

Position 314, KASP marker for MYB25-like_At of Xu142fl

Xu142_MYB25-like_Dt      GACAATGAGATCAAGAAGTACTGGAATACACAGTTGAAGAAAAGATTGACCAGATAGGG 360
Xu142fl_MYB25-like_Dt   GACAATGAGATCAAGAAGTACTGGAATACACAGTTGAAGAAAAGATTGACCAGATAGGG 360
Xu142_MYB25-like_At     GACAATGAGATCAAGAAGTACTGGAATACACAGTTGAAGAAAAGATTGACCAGATAGGG 360
Xu142fl_MYB25-like_At   GACAATGAGATCAAGAAGTACTGGAATACACAGTTGAAGAAAAGATTGACCAGATAGGG 360
*****

Xu142_MYB25-like_Dt      ATCGACCCTGCAACTCACAGGCCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGTC 420
Xu142fl_MYB25-like_Dt   ATCGACCCTGCAACTCACAGGCCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGTC 420
Xu142_MYB25-like_At     ATCGACCCTGCAACTCACAGGCCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGTC 420
Xu142fl_MYB25-like_At   ATCGACCCTGCAACTCACAGGCCTAAAACCGATACCCTCGGTTCAACTCCCAAGGATGTC 420
*****

Xu142_MYB25-like_Dt      GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGTCTCGGTTAGAAGCTGAAGCTAGATTG 480
Xu142fl_MYB25-like_Dt   GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGTCTCGGTTAGAAGCTGAAGCTAGATTG 480
Xu142_MYB25-like_At     GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGTCTCGGTTAGAAGCTGAAGCTAGATTG 480
Xu142fl_MYB25-like_At   GCTAACCTTAGCCACATGGCTCAATGGGAGAGTGTCTCGGTTAGAAGCTGAAGCTAGATTG 480
*****

Xu142_MYB25-like_Dt      GTGAGAGAGTCGAAACGAGTTTCAAACCTTCGCAAAAACCAATTTAGGTTACAGTCTTCA 540
Xu142fl_MYB25-like_Dt   GTGAGAGAGTCGAAACGAGTTTCAAACCTTCGCAAAAACCAATTTAGGTTACAGTCTTCA 540
Xu142_MYB25-like_At     GTGAGAGAGTCGAAACGAGTTTCAAACCTTCGCAAAAACCAATTTAGGTTACAGTCTTCA 540
Xu142fl_MYB25-like_At   GTGAGAGAGTCGAAACGAGTTTCAAACCTTCGCAAAAACCAATTTAGGTTACAGTCTTCA 540
*****

Xu142_MYB25-like_Dt      TCTGCTCCTCCACTGGTAAACAAAATTGATGTTGGTTTGGCTCATGCTACTAAACCGCAA 600
Xu142fl_MYB25-like_Dt   TCTGCTCCTCCACTGGTAAACAAAATTGATGTTGGTTTGGCTCATGCTACTAAACCGCAA 600
Xu142_MYB25-like_At     TCGCTCCTCCACTGGTAAACAAAATTGATGTTGGTTTGGCTCATGCTACTAAACCGCAA 600
Xu142fl_MYB25-like_At   TCGCTCCTCCACTGGTAAACAAAATTGATGTTGGTTTGGCTCATGCTACTAAACCGCAA 600
*****

Xu142_MYB25-like_Dt      TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
Xu142fl_MYB25-like_Dt   TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
Xu142_MYB25-like_At     TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
Xu142fl_MYB25-like_At   TGCCTCGATGTACTCAAAGCTTGGCAACGTGTAGTCACTGGATTGTTCACTTTCAACACT 660
*****

Xu142_MYB25-like_Dt      GACAACCTCCAATCTCCAACATCGACGTCGAGCTTACGGAACACAGTTACCAATCTCA 720
Xu142fl_MYB25-like_Dt   GACAACCTCCAATCTCCAACATCGACGTCGAGCTTACGGAACACAGTTACCAATCTCA 720
Xu142_MYB25-like_At     GACAACCTCCAATCTCCAACATCGACGTCGAGCTTACGGAACACAGTTACCAATCTCA 720
Xu142fl_MYB25-like_At   GACAACCTCCAATCTCCAACATCGACGTCGAGCTTACGGAACACAGTTACCAATCTCA 720
*****

Xu142_MYB25-like_Dt      TCTGTCGGATTTCATTGACAGCTTTGTGGGGAACCTCAAATAACAGCTGTTGCGGAAATAAT 780
Xu142fl_MYB25-like_Dt   TCTGTCGGATTTCATTGACAGCTTTGTGGGGAACCTCAAATAACAGCTGTTGCGGAAATAAT 780
Xu142_MYB25-like_At     TCTGTCGGATTTCATTGACAGCTTTGTGGGGAACCTCAAATAACAGCTGTTGCGGAAATAAT 780
Xu142fl_MYB25-like_At   TCTGTCGGATTTCATTGACAGCTTTGTGGGGAACCTCAAATAACAGCTGTTGCGGAAATAAT 780
*****

Xu142_MYB25-like_Dt      TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGAGTTACAGGAAAGATTGGATAACTCA 840
Xu142fl_MYB25-like_Dt   TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGAGTTACAGGAAAGATTGGATAACTCA 840
Xu142_MYB25-like_At     TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGAGTTACAGGAAAGATTGGATAACTCA 840
Xu142fl_MYB25-like_At   TGGGAATGTGTGGAGAAATCGAGCCAAGTTGCTGAGTTACAGGAAAGATTGGATAACTCA 840
*****
```

Xu142_MYB25-like_Dt ATGGGGTTGCATGACATATTGGAT**T**TCCTCCAGAAAGATGTATGGTTTCAAGGCTCATA 900
Xu142fl_MYB25-like_Dt ATGGGGTTGCATGACATATTGGAT**T**TCCTCCAGAAAGATGTATGGTTTCAAGGCTCATA 900
Xu142_MYB25-like_At ATGGGGTTGCATGACATATTGGAT**C**TCCTCCAGAAAGATGTATGGTTTCAAGGCTCATA 900
Xu142fl_MYB25-like_At ATGGGGTTGCATGACATATTGGAT**C**TCCTCCAGAAAGATGTATGGTTTCAAGGCTCATA 900

Xu142_MYB25-like_Dt AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960
Xu142fl_MYB25-like_Dt AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960
Xu142_MYB25-like_At AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960
Xu142fl_MYB25-like_At AGGGCGGAAAATATGATGGAAGGGTATTCGGACACGTTAATGGTTTGTGATTCTGGGGAT 960

Xu142_MYB25-like_Dt CAT**C**AGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
Xu142fl_MYB25-like_Dt CAT**C**AGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
Xu142_MYB25-like_At CAT**C**AGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
Xu142fl_MYB25-like_At CAT**C**AGAAGAGTTTGTCAATGGAGCCTAGACAAAACCTTAATGTTGGAACAAGTAATGCT 1020
*** *****

Xu142_MYB25-like_Dt AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTGCGAATGCTTCC 1080
Xu142fl_MYB25-like_Dt AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTGCGAATGCTTCC 1080
Xu142_MYB25-like_At AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTGCGAATGCTTCC 1080
Xu142fl_MYB25-like_At AGTAGTTTCGAAGAAAACAAGAATTACTGGAACAACATCCTTAATTTGCGAATGCTTCC 1080

Xu142_MYB25-like_Dt CC**A**TCTGGTTCTTCTGTCTTTTGA 1104
Xu142fl_MYB25-like_Dt CC**A**TCTGGTTCTTCTGTCTTTTGA 1104
Xu142_MYB25-like_At CC**T**TCTGGTTCTTCTGTCTTTTGA 1104
Xu142fl_MYB25-like_At CC**T**TCTGGTTCTTCTGTCTTTTGA 1104
** *****