

a

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AgS-MULE3  TATATATATAGGGGAGAGTTCCTGTACAAAATGGATCTTTTG-GAG-AAACGTA.....TACGTTTCTCACAAAAGAGCCATTTTGTACCCGA-TCCTCTACCTACCTACCTACCTATATAT
gSaTar1f   GGGAGGGTTCCTGTACAAAATAGTTTTTTTGTGAG-AAATGTA.....TACATTTCTCACAAAAGTTCATTTTGTACCCGA-TCCC-----
gSaTar1c   GGATAGGGTTCCTGTATAAAAGGTGTTTTTTTTTTAAAGTGTA.....TACACTTCTCACAATAACACCCCTTTGTACACGAATCTC-----

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b

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AgS-MULE4  GTATATATGTAGGGTGGGGTTAGTGTA---GAAATGGTGTTTTTTGTGAGAAATGGTAGGAA.....TCTCACTGTTCTCACAAAACCTCATGTTTTCACCGGAACCTTTATATATATATA
gSaTar5a   GGGTCAGGATCATGTACAAAAAAGGTGTTTT--GTGAGAAGGGTAAGAA.....TCTTACCCTTCTCACAAAACCAAT-TTTTGTACAAGATCCC
gSaTar5b   GGGTCAGGATCCTGTACAAA---TGGTGTTTTTTGTGAAAAGGGTAAGAA.....TCTTACTTCTCACAATTCTAAT-TTTTATACAAGATCCC

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c

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AgS-MULE5  TATATATATAGGGTAGGGATCCTAAGAGAACCAACCCCTAATTTGAGAACCAAGAGAACCATTCT....AAGAATGGTTCTCTTGGTTCTCAAATTGCCAATTGGTTCT-----ATATATAT
gSaTar10b  GGGTAGGGATCCTAAGAGAACCAACCCCTAATTTGAGAACCAAGAGAACCATTCT....AAAAATGGTTCTCTCAGTTCTCAAATTGCCAATTGGTTCTCAAATGATCCAAATCC
gSaTar10a  GGGTAGGGATCCTAAGAGAACCAACCCCTAATTTGAGAGCCATGAGAACTATTTT....AGAATGGTTTCTCAGTTCTCAATTAGGCCTTTGGTTCTCAAATGATCCAAATC-

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d

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AgS-MULE6  ATATATATATATTATAGGGTAGGGATCATGCGAGAACCAACTTTATTGCGAGAACCAGGAGAACCAATGT....TGTTCTCGCGGTTCTCACAATAAAGTGTGGTTCTCAAATGATCCACATCCATATATATATATA
gSaTar9    GGGTAGGGATCATGCGAGAACCAACTTTATTGCGAGAACCAGGAGAACCAATGT....TGTTCTCGCGGTTCTCACAATTAATGGTGGTTCTCAAATGATCCAAATC-

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Additional File 5.

Alignment of non-autonomous gSaTar and autonomous gSaTar-MULE (AgS-MULE) terminal inverted repeat domains.

a. Alignment of the terminal inverted repeats defining autonomous AgS-MULE3 (CLC-Scaffold1884 56971-41832). b. Alignment of the terminal inverted repeats defining autonomous AgS-MULE4 (CLC-Scaffold3452 21113-10167). c. Alignment of the terminal inverted repeats defining autonomous AgS-MULE5 (CLC-Scaffold8263 29876-19005). d. Alignment of the terminal inverted repeats defining autonomous AgS-MULE6 (MeraculousScaffold65485 40526-50707) . AgS-MULE2 (Scaffold 19101 9877-13725) not shown. gSaTar TIRs from Additional file 1.