

Supplementary Table S1. Summary of the basic parameters in short-read RNA sequencing dataset.

Sample	Clean reads	Unmapped reads	Mapped reads	Map rate
WT-CT-1	65944016	1589104	64354912	97.59%
WT-CT-2	48924508	1167567	47756941	97.61%
WT-CT-3	55942394	1317916	54624478	97.64%
WT-Dark-1	51500318	1275206	50225112	97.52%
WT-Dark-2	57206881	1512115	55694766	97.36%
WT-Dark-3	58275562	1508723	56766839	97.41%
WT-Heat-1	63452482	1613203	61839279	97.46%
WT-Heat-2	64318066	1744158	62573908	97.29%
WT-Heat-3	73779958	3929931	69850027	94.67%
Average	59927132	1739769	58187362	97.17%

Supplementary Table S2. Primer used for PCR analysis in this study.

Gene name	Gene ID	Primer name	Primer sequences
<i>DINI</i>	AT4G35770	AS1 F	GAAAGCAACGACAACAAGCA
		AS1 R	TCTTAACCATTCCGTGATCCGAC
		AS2 (IR) F	GAAAGCAACGACAACAAGCA
		AS2 (IR) R	GCAACGGTTTGGCTTGG
<i>DIN6</i>	AT3G47340	AS1 F	CGACCCTGAATCCAAGATGATCAAG
		AS1 R	GCGTGATCTTCAGGCCATC
		AS2 (IR) F	CACAAACTCAATACTTCCTTCACA
		AS2 (IR) R	GCGTGATCTTCAGGCCATC
<i>DIN10</i>	AT5G20250	AS1 F	TCAATTGGTCATACAAGAGAAGC
		AS1 R	ACCGCCGGTTAACGTCAT
		AS2 (IR) F	AACCCAGAACGACTTCATCTCA
		AS2 (IR) R	ACCGCCGGTTAACGTCAT
<i>GT-I</i>	AT1G13450	AS1 F	GAGACTCCTGGAAACGGTGTGATG
		AS1 R	AAGGGCATGTCTCGGTCAAG
		AS2 (IR) F	TGCTTGATTATTCTCGTCGGTCTC
		AS2 (IR) R	AAGGGCATGTCTCGGTCAAG
<i>SPA3</i>	AT3G15354	AS1 F	ATTCATCAGCAGACCCGAC
		AS1 R	TGCTAACTCCCTGATTGATACT
		AS2 (IR) F	ATTCATCAGCAGACCCGAC
		AS2 (IR) R	GTTCAGTTCAATAGCCGACA
<i>HYH</i>	AT3G17609	AS1 F	CACAAGAACGACAAAATGAGGA
		AS1 R	CGGGCGTTAGCTGTAGAGA
		AS2 (AE) F	ACAAGAACGACAAAATGCTGG
		AS2 (AE) R	CGGGCGTTAGCTGTAGAGA
<i>JMD5</i>	AT3G20810	Total F	GGTGGTGGGAACTCCAATC
		Total R	GTGTAACGGAGTAACGTCCC
		AS2 (AE) F	GGTGGTGGGAACTCCAATC
		AS2 (AE) R	CCAGCGAGAACATCAGGCTGAGC
<i>HSFA2</i>	AT2G26150	Total F	GGAGGAACATGGGTTGCAG
		Total R	CGAAACCGTATTGCCAAC
		AS2 (CE) F	ATTCTCGTCAGCTCAATACTTATATGGG
		AS2 (CE) R	CGAAACCGTATTGCCAAC
<i>Luc7-lr</i>	AT5G51410	AS1 F	TGCAAATTAATGAGCTATTCTAAG
		AS1 R	CTCAACGCTTTGACCTCTT
		AS2 (IR) F	ATGTGATACCCCCTTGGTT
		AS2 (IR) R	CTCAACGCTTTGACCTCTT
<i>RBM25</i>	AT1G60200	AS1 F	CCATGCCTCCTCATGGGCTT
		AS1 R	GGGTCGTGGTGTAGTTGAA
		AS2 (AE5) F	TGCTCTAGTTGTGGGCTTC
		AS2 (AE5) R	GGGTCGTGGTGTAGTTGAA

<i>PRP4</i>	AT2G41500	AS1 F AS1 R AS2 (AE3) F AS2 (AE3) R		CTGGTCAGACTCAGAGGTTAT AATTGACGAAACCCGCGAAT CTGGTCAGACTCAGAGGAAAC AATTGACGAAACCCGCGAAT
<i>SYF2</i>	AT2G16860	AS1 F AS1 R AS2 (AE3) F AS2 (AE3) R		TCCGCGAGATATCTGGTGTTC CGTAAGATTTTCCAAAACCTGT TCCGCGAGATATCTGGTGTTC ACTTCCAAGCGTTAAGAAACTGTG
<i>U2AF65a</i>	AT4G36690	AS1 F AS1 R AS2 (AE3) F AS2 (AE3) R		GGTTATGTTACAGCCTGGT AAAGCACCAAACTTCCGC GGTTATGTTACAGCCTGGT TCTTTATAGCAAAAGGCAAAC
<i>RSZ32</i>	AT3G53500	AS1 F AS1 R AS2 (IR) F AS2 (IR) R		CTATGGAAACACTCGCCTCT CACATCTCGTACTCTTCCGTA CTATGGAAACACTCGCCTCT TATCCCCCTGCACAACATCAA
<i>RS40</i>	AT4G25500	AS1 F AS1 R AS2 (AE5&IR) F AS2 (AE5&IR) R		TGAAAGCTGGGTTGCTTT AATTCAAAGCGGTCAAGTGC TCAGGAAATACGGCAAGGTT GATAGTCCACCAGAGCCTTC
<i>hnRNP-P</i>	AT1G50300	AS1 F AS1 R AS2 (AE5) F AS2 (AE5) R		ACCATTGGGTTGCTTAAGAGAGA CTCCCTTGGGCTCATCAGTT GGTATGGTATTGCCAGAGAGAC CTCCCTTGGGCTCATCAGTT
<i>SR30</i>	AT1G09140	Total F Total R AS1 F AS1 R AS2 F AS2 R AS3 F AS3 R AS4 F AS4 R AS5 F AS5 R CDS F CDS R		GATCGAATTCTCCAGTTCACCT CGAGACAGAGTTCCGGCTT TCTGTCTCAAGGTCCCAATCA CGAGACAGAGTTCCGGCTT CTTAGTCGTTCTCGCTCGCT CCAGCTTGAAATCCAGTCC CTTAGTCGTTCTCGCTCGCT TCAACTGTGTACGGAAGCAA CGGGTATGTTGTATTGCTTTCTT ATCATCTGGGCTTCGACTCA GGTTAGTAAACGCATGATGAAAG AAATCTACGACCACCATGTGC CACCATGAGTAGCCGATGGAATCGT TCAACCAGATATCACAGGTGAA
<i>ACT2</i>	AT3G18780	F R		TGTGCCAATCTACGAGGGT GCTGGTCTTGAGGTTCC