

Table 1 Suppl. The primers of miRNAs in non-heading Chinese cabbage designed for RT-qPCR.

Primer names	Primer sequences (5' to 3')
bra-miR1530a	GCCGGCTTTTAACATAAAACAAAATAT
bra-miR 1533ah	GCGCCGATAAAATAAAATAAAAATGA
bra-miR 1533aj	GCGGCGCATAAAAAATATAATAATTA
bra-miR 1533d	GGCCCGATAAGAAAAATCAATAATGA
bra-miR 1533m	GCCGGCGCATAATAAAAAATATTAATAA
bra-miR 1533t	GCCGGCGCAAAATAAAAAATATTAATTA
bra-miR 1533v	GCGGCCGCATAATAAAAAATTATAATAA
bra-miR 172f	GCCGAGAATCATGATGATATTGCA
bra-miR 414a	GCCGTCATCTTCATCATCATCATCA
bra-miR 398b	GCGTGTTCTCAGGTCACCCC
Contig4515L	TGTTACAGCCGAAGGACAAG
Contig4515R	CTCTTCTCCAACCAACAGCA
EX135362L	CTTCTCCATCGTCTTCGTCA
EX135362R	CAAAGCCTCAGAGAGAGCCT
Contig4123L	TGGATCACCGCAGTATTGTT
Contig4123R	TGCGTAGCTATACGCTTTGG
EX106730L	TAGCAGGAGGACCAAACACA
EX106730R	TGAGAGTGTCGAGGGATGTC
EX098234L	CACCGATGACCAGATCTCAG
EX098234R	AACGTACCGTCACCATCCTT
EX122692L	TCTCACTATTTCGGTGGCT
EX122692R	CATTTGCCAACACTTGGTTC
DN191400L	TCTGAAGACGATGCAGATCC
DN191400R	CTGATTCCAGGTTTCGGTTT
Contig5676L	CGATTCTTCAAGACGACGAA
Contig5676R	GATAGCTAGCGTGTTTGGCA
EX098990L	TGCCAGATGGTGTGATCTTT
EX098990R	TCCGAGTCGTAGAATTGCTG
Contig4350L	TTGATCCGTTTCCTATTGGTC
Contig4350R	TGATTTCGATTTCGGTTGTT
Br-actin-F	TCACTTCTCCTCCTTCTTTGG
Br-actin-R	TAGGCATCCTTCTGGTTCATC

Table 2 Suppl. Types, positions, and statistical parameters of *cis*-elements in the upstream regions of bra-miR1530a.

Site name	Plant species	Position	Matrix score	Sequence
ARE	<i>Zea mays</i>	354	6	TGGTTT
ARE	<i>Zea mays</i>	1003	6	TGGTTT
ARE	<i>Zea mays</i>	670	6	TGGTTT
ARE	<i>Zea mays</i>	1474	6	TGGTTT
GC-motif	<i>Oryza sativa</i>	91	9	CGCCGCGCA
HSE	<i>Brassica oleracea</i>	544	9	AAAAAATTTTC
HSE	<i>Brassica oleracea</i>	1015	9	AAAAAATTTTC
TCA-element	<i>Brassica oleracea</i>	816	9	GAGAAGAATA
TGA-element	<i>Brassica oleracea</i>	1303	6	AACGAC

Table 3 Suppl. Types, positions, and statistical parameters of *cis*-elements in the upstream regions of bra-miR1533ah.

Site name	Plant species	Position	Matrix score	Sequence
HSE	<i>Brassica oleracea</i>	1416	9	AAAAAATTTTC
TGA-element	<i>Brassica oleracea</i>	982	9	AACGAC
TGA-element	<i>Brassica oleracea</i>	1483	6	AACGAC

Table 4 Suppl. Types, positions, and statistical parameters of *cis*-elements in the upstream regions of bra-miR1533aj.

Site name	Plant species	Position	Matrix score	Sequence
LTR	<i>Hordeum vulgare</i>	631	6	CCGAAA
MBS	<i>Arabidopsis thaliana</i>	778	6	CAACTG
MBS	<i>Arabidopsis thaliana</i>	879	6	CAACTG

Table 5 Suppl. Types, positions, and statistical parameters of *cis*-elements in the upstream regions of bra-miR1533d.

Site name	Plant species	Position	Matrix score	Sequence
ABRE	<i>Arabidopsis thaliana</i>	439	7	TACGGTC
ABRE	<i>Arabidopsis thaliana</i>	533	6	TACGTG
ABRE	<i>Hordeum vulgare</i>	531	9	CCTACGTGGC
ARE	<i>Zea mays</i>	482	6	TGGTTT
ARE	<i>Zea mays</i>	1327	6	TGGTTT
TCA-element	<i>Brassica oleracea</i>	905	9	AGAAAAGGA

Table 6 Suppl. Types, positions, and statistical parameters of *cis*-elements in the upstream regions of bra-miR1530m.

Site name	Plant species	Position	Matrix score	Sequence
ABRE	<i>Arabidopsis thaliana</i>	204	7	TACGGTC
ARE	<i>Zea mays</i>	59	6	TGGTTT
ARE	<i>Zea mays</i>	1362	6	TGGTTT
HSE	<i>Brassica oleracea</i>	100	9	AGAAAATTCG
LTR	<i>Hordeum vulgare</i>	576	6	CCGAAA
MBS	<i>Arabidopsis thaliana</i>	41	6	TAACTG
MBS	<i>Arabidopsis thaliana</i>	671	6	TAACTG
MBS	<i>Zea mays</i>	203	6	CGGTCA
MBS	<i>Arabidopsis thaliana</i>	131	6	CAACTG
MBS	<i>Arabidopsis thaliana</i>	639	6	TAACTG
TGA-element	<i>Brassica oleracea</i>	158	6	AACGAC

Table 7 Suppl. Types, positions, and statistical parameters of *cis*-elements in the upstream regions of bra-miR1530t.

Site name	Plant species	Position	Matrix score	Sequence
ARE	<i>Zea mays</i>	369	6	TGGTTT
ARE	<i>Zea mays</i>	738	6	TGGTTT
GARE	<i>Brassica oleracea</i>	978	7	AAACAGA
HSE	<i>Brassica oleracea</i>	1186	9	AAAAAATTTC
LTR	<i>Hordeum vulgare</i>	571	6	CCGAAA
MBS	<i>Zea mays</i>	169	6	CGGTCA

Table 8 Suppl. Types, positions, and statistical parameters of *cis*-elements in the upstream regions of bra-miR1530v.

Site name	Plant species	Position	Matrix score	Sequence
ABRE	<i>Hordeum vulgare</i>	753	9	GCCACGTACA
ABRE	<i>Arabidopsis thaliana</i>	755	6	TACGTG
ARE	<i>Zea mays</i>	237	6	TGGTTT

ARE	<i>Zea mays</i>	911	6	TGGTTT
MBS	<i>Arabidopsis thaliana</i>	22	6	TAACTG
MBS	<i>Arabidopsis thaliana</i>	1164	6	CAACTG
MBS	<i>Zea mays</i>	917	6	CGGTCA
MBS	<i>Arabidopsis thaliana</i>	789	6	TAACTG
MBS	<i>Arabidopsis thaliana</i>	1024	6	CAACTG

Table 9 Suppl. Types, positions, and statistical parameters of *cis*-elements in the upstream regions of bra-miR172f.

Site name	Plant species	Position	Matrix score	Sequence
ABRE	<i>Hordeum vulgare</i>	151	9	CCGCGTAGGC
ARE	<i>Zea mays</i>	552	6	TGGTTT
ARE	<i>Zea mays</i>	839	6	TGGTTT
ARE	<i>Zea mays</i>	639	6	TGGTTT
ARE	<i>Zea mays</i>	595	6	TGGTTT
ARE	<i>Zea mays</i>	765	6	TGGTTT
GARE-motif	<i>Brassica oleracea</i>	140	7	AAACAGA
GARE-motif	<i>Brassica oleracea</i>	1368	7	AAACAGA
GARE-motif	<i>Brassica oleracea</i>	1347	7	TCTGTTG
HSE	<i>Brassica oleracea</i>	255	9	AAAAAATTTC
LTR	<i>Hordeum vulgare</i>	849	6	CCGAAA
MBS	<i>Arabidopsis thaliana</i>	349	6	CAACTG
MBS	<i>Arabidopsis thaliana</i>	1095	6	TAACTG
MBS	<i>Arabidopsis thaliana</i>	920	6	TAACTG
TCA-element	<i>Brassica oleracea</i>	465	9	CAGAAAAGGA
TCA-element	<i>Brassica oleracea</i>	825	9	CAGAAAAGGA
TGA-element	<i>Brassica oleracea</i>	1455	6	AACGAC

Table 10 Suppl. Types, positions, and statistical parameters of *cis*-elements in the upstream regions of bra-miR414a.

Site name	Plant species	Position	Matrix score	Sequence
ABRE	<i>Hordeum vulgare</i>	922	9	GCCACGTACA
ARE	<i>Zea mays</i>	411	6	TGGTTT
ARE	<i>Zea mays</i>	847	6	TGGTTT
GARE-motif	<i>Brassica oleracea</i>	227	7	TCTGTTG
GARE-motif	<i>Brassica oleracea</i>	715	7	AAACAGA
MBS	<i>Arabidopsis thaliana</i>	1319	6	CAACTG
TCA-element	<i>Brassica oleracea</i>	1351	9	CAGAAAAGGA

Table 11 Suppl. Types, positions, and statistical parameters of *cis*-elements in the upstream regions of bra-miR398b.

Site name	Plant species	Position	Matrix score	Sequence
ARE	<i>Zea mays</i>	757	6	TGGTTT
ARE	<i>Zea mays</i>	845	6	TGGTTT
LTR	<i>Hordeum vulgare</i>	598	6	CCGAAA
MBS	<i>Arabidopsis thaliana</i>	207	6	CAACTG
MBS	<i>Arabidopsis thaliana</i>	1304	6	TAACTG
MBS	<i>Zea mays</i>	367	6	CGGTCA
TCA-element	<i>Nicotiana tabacum</i>	1469	9	CCATCTTTT
TGA-element	<i>Brassica oleracea</i>	751	6	AACGAC

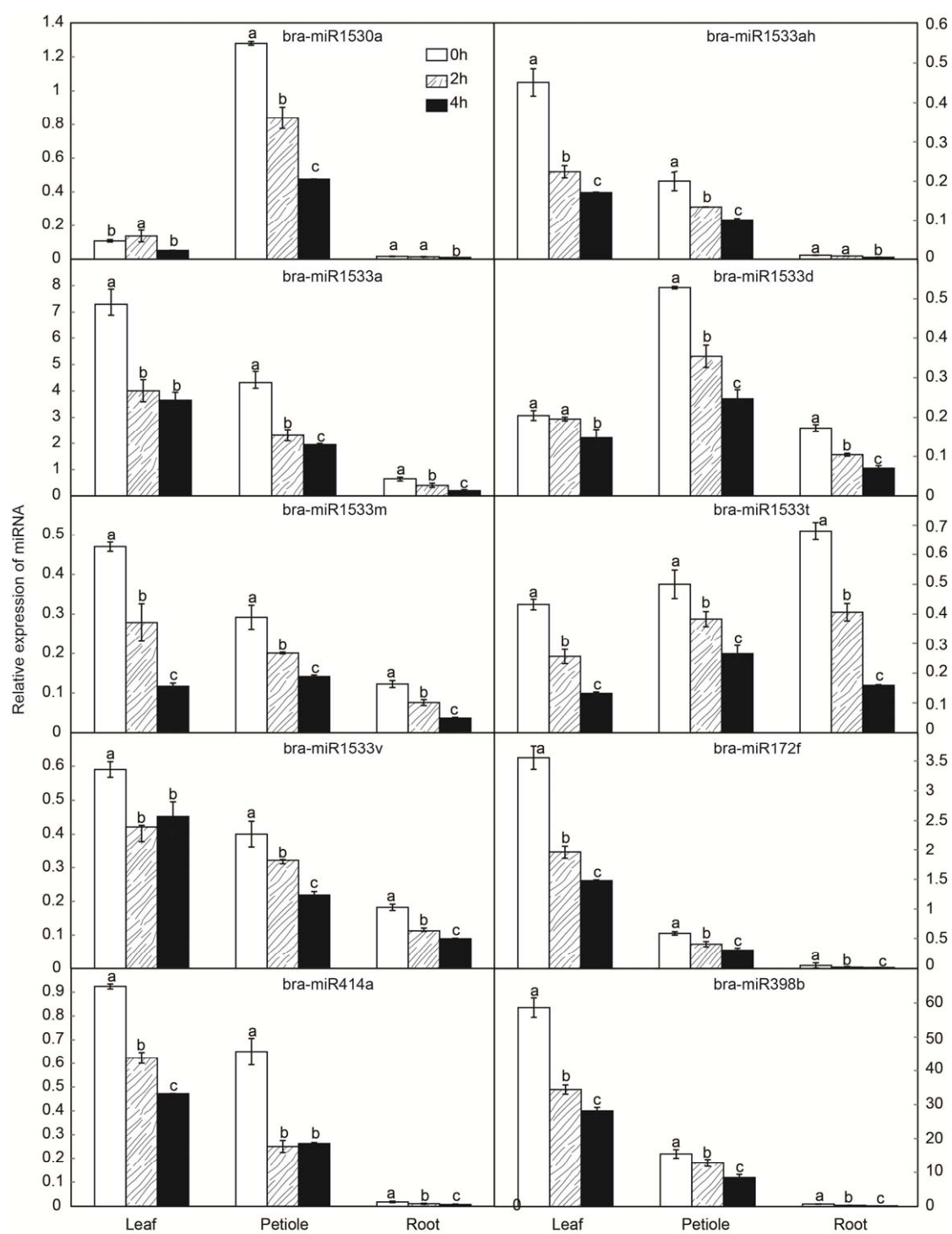


Fig. 1 Suppl. The transcriptions of miRNAs in leaves, petioles, and roots of cv. Wutacai grown at 100 μM Cu^{2+} for 0, 2, and 4 h. Values represent means $\pm$ SE of three replicates. Different letters indicate significant differences ($P < 0.05$) between the control (0 h) and Cu-treated plants.