

a

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LNC_000283 : CCATCTTGC GGAAC CAGACAATTACATAAAATTA AACTCCACG TATCCCGGTATCCGTGACAAAAAAAAAAAAAAAAAACTCCACGTACAAG : 93
CNT2088434 : -----AATTC CAAAACC---AACAGTTACAGAGAA TAGAAACTCCAC-----AAG : 44
                        TAT CC   A C   A A   A A A A A A A A AACTCCAC   AAG

LNC_000283 : ACGCCCTTATTATATTGAT-----AAACACCTCAATAAGTAAGTAGACACAGTGATGATGGTGGT---CCGATGTTGATGATGATAAT : 177
CNT2088434 : ACCCCCTTATTATATTGATTTATCGAAAACACACCAATAAATACAAATATCGATCGAGATAGTGTGACGATAGTGTATGATGATGATGAT : 137
                        AC C C C T T A T T A T T G A T       A A C A C C   A A T A A   G A   G   G A T   T G   T G A   G   T   G   G A T G T G A T G A T G A T A T

LNC_000283 : *      200      *      220      *      240      *      260      *      28
GATGATGGTGGTGA--TGGTTATAATGATTAAGCTTTGTTGACGTGGTGGTCCATGTGGCCACCAGGCTCTTGACGAATTTTCATGTAGGTG : 267
CNT2088434 : *      200      *      220      *      240      *      260      *      28
GATGACGACGACGACTGTGGGAATGATGATTAAGTTTGGTTACGTGGTTTTCCCATGTGACGCAACCAAGCTCTTGACGAATTTTCATGTACCCG : 230
GATGA G G GA TGG AT ATGATTAAG TTTG T ACGTGGT CCATGTC GC ACCA GCTCTTGACGAATTTTCATGTA G

LNC_000283 : 0 *      300      *      320      *      340      *      360      *
CTTGGTTCAGGAGAAATCATCGTTGCGCTTCTCCACACAATAGTGATTTTGACGCGCAGGTATCCTCAGTTTGGGGATAAAATGGTAGATG : 360
CNT2088434 : 0 *      300      *      320      *      340      *      360      *
CTTGGTTCAGGAGAAATCATCGTTGCGCTTCTCCACACAATAGTGATTTTGACGCGCAGGTATCCTCAGATTTGGGAATGAATGGTAGACG : 323
CTTGGTTC GG GAATCATCGTTGCGCTTCTCCCA A A AGTGATTTTG G GCAGGTATCCTCAG TTTGGG AT AATGGTAGA G

LNC_000283 : *      380      *      400      *      420      *      440      *      460
ACATCATACACTTGAGTTGCTCCATCACGTGACCCCAAGTCCCTCTTAACGTC AAGCTTAAGTTCCTCATCGTCTACCTCTCTCTTCTCCTTG : 453
CNT2088434 : *      380      *      400      *      420      *      440      *
ACGTCGTACACTTTGAGTTGCTCCATCACGTGACCCCAAGTCCCTCTTAACGTC AAGC----- : 381
AC TC TACAC TTGAG TGCTCCATCACGTGACCCCAAGTCCCTCTTAACGTC AAG

LNC_000283 : *      480      *      500      *      520      *      540      *      5
AACATCTCTTCCCTTTCCATCCAGGTGTAGTTCCAGTCCCTGTAGTAGAACCATGGGAGTCATGTTCCGCCCTCGTGAACGGGTGACATTTGGGATG : 546
CNT2088434 : ----- : -

LNC_000283 : 60 *      580      *      600      *      620      *      640      *
TGGTGGCCGATGGCGTCAGGGAAGACATGGTTCTCGCTCTCCACCTTTGTAGTGTCTCCGCTGTTCCTTTCAACGGAACCTCCGTCAGG : 639
CNT2088434 : ----- : -

LNC_000283 : *      660      *      680      *      700      *      720      *
TATGTTCCCTGAGTCGCCATTTCTCTCTCCTCTCTCTTTTAAAGCTTCTACTTGTATTATTTTGGGTTGTGATGGTT : 720
CNT2088434 : ----- : -

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b

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*      20      *      40      *      60      *      80      *
LNC_012465 : TATGCGTAAACAATAAAATACAATCAACAACCTCTGTTTATATATATGAGAAGCTCATGTGATTGAGTTAGTAATAAAATATTTATTAAAGTCT : 92
CNT2088742 : -----AGGAACCT---GTCT : 12
                A  A  T  GTCT

*      100     *      120     *      140     *      160     *      180
LNC_012465 : AGCAGTTTATTCACAATCAAAGAATGAATGAATCATCAA--TACAGAAAGAATGAATAGGAAGACTAATAATAAGTTGACTTCTCAATCTTC : 183
CNT2088742 : AGCATTTTATTCACAATAAAAGAATGAATGAATCATCAAATACA--AAAGAATGAATAAATAATAGAAAGACAAAAGTTGACTT---TCATC : 98
                AGCA TTTATTCACAAT AAAGAATGAATGAATCATCAA TACA AAAGAATGAATA A A A A AAGTTGACTT TC TC

*      200     *      220     *      240     *      260     *
LNC_012465 : AAACATCAAAACTTTCCACATCTCTCAATAGACAAAGAGACTTTGTGACCAAATGATCACTGTGGACGGTTTCTAAGCTAAAGCTCTG : 275
CNT2088742 : GAACATCAAAACTTTCCACACTCTCTCAATAGACAAGAGAAAGCTATGACCAA-----CTGTA-----TCCCTTAG--GAAGCTT-- : 172
                AAC ATCAAAACTTTCCACA CTCTCAATAGACA AGAGA T TGACCAA CTGT T CT AG AAGCT

*      280     *      300     *      320     *      340     *      360
LNC_012465 : TTCCAGCAACTCTAAGCATCTTTCCACTTTCATTACTAGCTTCGATCTCAACCTCCTCGGTGTTACATTTACAGTTAAACAACGCTTCAAG : 367
CNT2088742 : -----CAGCTCCATGTAGAG-----CTAG-----ACATTTACAGTTAATGAATGCTTCAAG : 218
                CA CTC A A G CTAG ACATTTCA GTTAA AA GCTTCAAG

*      380     *      400     *      420     *      440     *      460
LNC_012465 : AGCTTCTCTCATCCACCAATTCTGACAAACCTCTCTCTGCTTCATCCAAAGCCACCCATTTGCGTTGTCTCATCTGAGCTTCAGGCCATCGCT : 459
CNT2088742 : AGCTTCTCTCATCCACCAATTCTGACAAACTCTCTCTGCTTCATCCAAAGTTACCCATCTGCGTTGTCTCATTTCCGGCTCAGGCCATCGCT : 310
                AGCTTCTCTCATCCACCAATTCTGACA AC TCTC TGCTTCATCCAAAC ACCCAT TGCGTTGTCTCAT TC GC TCAGGCCATCGCT

*      480     *      500     *      520     *      540     *
LNC_012465 : CGAACTCTTGTCACCAAGCAAGCCAAACATGATCCATGGTGAATTATGTTATGTCTTTTGCCTTTTGTATTGCCATTTCCCTAGCTTTTTC : 551
CNT2088742 : CGAACTCTTGACTGACCAAGCAAGCAAAACATATACCCATCTGTAATTATGCTATGTCTTTTGCCTTTTGTATTGCCATTTCCCAAGCTTTTCT : 402
                CGAACTCTTG AC AGCAAAGC AACAT TA CCAT GTGAATTATG TATGTCTTTTGCCTTTTGTATTGCCATTTCC AGCTTTTC

*      560     *      580     *      600     *      620     *      640
LNC_012465 : TCTAGCTCCCGGTTACACACAGCCTCTTCGATGGTCTCTCTGAGAGCTGCTTCTCCTCCATTGACTTCATGAATCTCCCAACCTCCTTTGGGAA : 643
CNT2088742 : TCGAGCTCTCCGTTACACCCGGCTCTTCGATCGTCTCTCTCAAGGAGCTTCTCTCCATTGATTCATCC----- : 471
                TC AGTC CC GT ACACC GC TCTTCGAT GTCTCTCT A AGC GCTTCTCCATTGA TCATC

*      660     *      680     *      700     *      720     *
LNC_012465 : TAACATTCCTTTCCCTTTTGGAGCACTTATGAGAAGAAGCTCGATTCTTTGGATTTCAGTTCCGTTGACTTGTGTGTTTGTATCGGTACG : 735
CNT2088742 : ----- : -

*      740     *      760     *      780     *      800     *      820
LNC_012465 : GTACACATCTACGACTTGACGATAGCCAGAGTTATCGTAACGCTGCAAAATCTCTGCCGGTGCGAGAGACCAAGAGACAACCTTCTCGATC : 827
CNT2088742 : ----- : -

*      840     *      860     *      880     *      900     *      920
LNC_012465 : TCGCGTGGGACAACCTTTCGATGGTATGGTCTCAAAGATCGGAGACAGATACGAGGGCAGCGTTTGGAGAAGTTTGAGACGATAAGAGACACAGA : 919
CNT2088742 : ----- : -

*      940     *      960     *      980     *      1000     *
LNC_012465 : GAAGCCTGTCATTTTTTTAATCCCTCTTTTACAAATTTAACAAATATGAGCAGGAGAGAGATGAATCAAAGGCTCTGTTCTTGAATT : 1011
CNT2088742 : ----- : -

*      1020     *      1040     *      1060     *      1080     *      1100
LNC_012465 : CGAGAGAATTGATTTAATTGTTTGAGAGAAGAGAAATGGATAAGCAACAAGAAAGGAAAGAGAGAGAGATGTGATTTTGTGATATAGTTAGGT : 1103
CNT2088742 : ----- : -

*      1120     *      1140     *      1160     *      1180     *
LNC_012465 : TATAGAAGTCTTTATATGAAAATCACAAGAGATGTTTAAACFCCACGCGCTTCTCGATGTGACGACGTTTCCCTACAACCTATTTTAT : 1195
CNT2088742 : ----- : -

*      1200     *      1220     *      1240     *      1260     *
LNC_012465 : TAGTATTTAATTGTTTTTTATATATCAACTTGCTACATTTGCATTTATATCACCTGAATCGAATCTAAGCTTTGCTGTTTT : 1276
CNT2088742 : ----- : -
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Fig. S1 Sequence alignment of *lnc000283* and *lnc012465* in Chinese cabbage with their homologous lncRNAs in Arabidopsis, respectively. a Sequence alignment of *lnc000283* and its homologous lncRNA *CNT2088434*. b Sequence alignment of *lnc012465* and its homologous lncRNA *CNT2088742*.