Cloning and Functional Characterization of Chalcone Isomerase Genes Involved in Anthocyanin Biosynthesis in *Clivia miniata*

Running title: Characterization of *CHI* in *Clivia miniata*

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Table S1 Information of *CmCHI1, CmCHI2* and *CmCHI3*

Candidate transcripts	Protein sequence length	Top *Arabidopsis* BLAST match	Top BLAST match excluding *Arabidopsis*	Homology (%)	GenBank number of the homology genes used in Blast
CmCHI1	237 residues	AAA32766.1 chalcone isomerase *Arabidopsis thaliana*	AIA59796.1 chalcone isomerase *Lycoris radiata*	59a,87b	AAA32766.1
CmCHI2	218 residues	AAA32766.1 chalcone isomerase *Arabidopsis thaliana*	AEO36936.1 chalcone isomerase *Canarium album*	51a,59b	AAA32766.1
CmCHI3	210 residues	AAA32766.1 chalcone isomerase *Arabidopsis thaliana*	AIU39024.1 chalcone isomerase 2 *Narcissus tazetta subsp. chinensis*	83a,88b	AAA32766.1

a% Similarity to *Arabidopsis thaliana*.

b% Highest similarity to other plant species.

Table S2 Primers used in the study

		Forward(5'-3')	Reverse(5'-3')
Full length cDNA sequence cloning	*CmCHI1*	ATGGGAGAAACATCGACGAC	TTGTGTGACATTAACGTACT
	CmCHI2	ATGGCCCAAGAGTCGTCCGT	TTGAAGAGCTTTTTAAGACT
	CmCHI3	ATGGGTTCTGAGATGGTGATG	CTTTACGATAGTCAACGAATC
qRT-PCR	*CmCHI1*	CCCTAGTGGCTCACTCACGATT	ATTTAGCAGCAGGCGATACACC
	CmCHI2	CGTGGATGATTCAGCAGTTTCC	GGCCCTTTGACAATATCAAGATAGAA
	CmCHI3	TGAGAACTGGAAAGGCAAGAAG	TGTGGGAGCTGAAATAAGAGCA
	CmActin	GCATCACACCTTCTACAA	CATTGTAGAAGGTGTGATG
Protein expression	CmCHI1	TGGCTGATATCGGATCCATGGGAGAAACATCGACG	CGACGGAGCTCGAATTCTCATGCAATTACAGTGTG
	CmCHI2	TGGCTGATATCGGATCCATGGCCCAAGAGTCGTCC	CGACGGAGCTCGAATTCTCAGAATTTTTCGAGAAG
	CmCHI3	TGGCTGATATCGGATCCATGGGTTCTGAGATGGTG	CGACGGAGCTCGAATTCCTAAGCAACTGATAGCAT
Transgenic plants	*CmCHI1*	ACGGGGGACTCTAGAGGATCCATGGGAGAAACATCG	GATCGGGGAAATTCGAGCTCTCATGCAATTACAGT
	CmCHI2	ACGGGGGACTCTAGAGGATCCATGGCCCAAGAGTCG	GATCGGGGAAATTCGAGCTCTCAGAATTTTTCGAG
	CmCHI3	ACGGGGGACTCTAGAGGATCCATGGGTTCTGAGATG	GATCGGGGAAATTCGAGCTCCTAAGCAACTGATAG
Subcellular localization	*GFP(35S:GFP)*	CTGATTACGCTCATATGATGGTGAGCAAGGGCGAG	AGGATTCAATCTTAAGTTACTTGTACAGCTCGTCCATG
	(GFP)CmCHI1	GACGAGCTGTACAAGCATATGGGAGAAACATCG	CAACAGGATTCAATCTTAAGTCATGCAATTACAGT
	(GFP)CmCHI2	GACGAGCTGTACAAGCATATGGCCCAAGAGTCG	CAACAGGATTCAATCTTAAGTCAGAATTTTTCGAG
	(GFP)CmCHI3	GACGAGCTGTACAAGCATATGGGTTCTGAGATG	CAACAGGATTCAATCTTAAGCTAAGCAACTGATAG