Table S1. Primer sequences used in this study

Experiment	Genes	Forward (5'-3')	Reverse (5'-3')	References
qRT-PCR	AcActin (Achn107181)	TGAGAGATTCCGTTGCCCAGAAGT	TTCCTTACTCATGCGGTCTGCGAT	Petriccione, M. et al. Reference gene selection for normalization of RT-qPCR gene expression data from Actinidia deliciosa leaves infected with *Pseudomonas syringae* pv. *actinidiae. Scientific Reports*, 2015, 5, 16961.
	AcHY5	ATGAGATCAGGAGAGTGCCG	AATCTCTTGAGCCGCTTGTG	Kim, S. et al. High ambient temperature represses anthocyanin biosynthesis through degradation of HY5. *Frontiers in Plant Science*, 2017, 8,1787
	AcCHS	ACAGCTTGACCACCTAAATGGGCTTA	CAAAGTGGAATAAAGCATGGCCAAT	
	AcCHI	GGAGGAGTTGACGGAATCCGTTG	AACTTTTCGACGGCTTTGGCCT	
	AcF3H	TGTACCCGCTCGCGATCCAG	ATTGCGTCTCTTTCGCAAGTTTCTTG	
	AcF3'H	GGTGGCGTATGCTCCGGAAGA	GTGGCCCGCACTCACCAGTG	Peng Y. et al. Differential regulation of the anthocyanin profile in purple kiwifruit (*Actinidia* species). *Horticulture Research*, 2019, 6(1): 3.
	AcDFR	GTCGGAGAAGCTGATTGGGATGGG	TGGCATTTCCATTGGGAGGGGTT	
	AcLDOX	AACAGTGGTCGGAACTAGGG	TCCTCCGAAACCAAGTCCTC	
	AcF3GT	TAGCCAAGCAGAGATCCGCTTCC	CAAGAATCCTTCTGGTAAGTACTGTTTCGA	
	AcbHLH42	AAGGGGAAGGCGGTGGATTCCG	GCACTGCAGCTCAACCAACG	
	AcCAO	ATCCGTTGGCACCTTGAA	GCGGCCCTCGTTTATTG	
	AcRBCS	GTTACATGGGCCAAGAAAACT	TCAAACTCAAGGCAAGGGAT	
	AcCBR	ATCGGATTCAAGTTATCAGGTG	GTTCGTCCCAGCATTGTTTAT	Liu Y. et al. Expression differences of pigment structural genes and transcription factors explain flesh coloration in three contrasting kiwifruit cultivars. *Frontiers in Plant Science*, 2017, 8:1507.
	AcGLUTR	CCGTTCCCACGATCAAGA	TGTCACTCCCGTCACATCTAAG	
	AcPPH	TGGAGGTGCTGTGGGATGA	CAAAAGATGTTGCTGGATTGG	
	AcPAO	TCCCGACCCCATTCCAA	TCAAAGGCGTCAGGCAAC	
	AcSGR	ACAAGCGACTGTGAGATGCC	GGTTTAGGGTTTGGTTTTGG	
CDS cloning	*AcBHLH42*	ATGGCGGCTCCCCCTA	TAGGGTATGATTTGGTGTATT	Wang L. et al. A MYB/bHLH complex regulates tissue-specific anthocyanin biosynthesis in the inner pericarp of red-centered kiwifruit *Actinidia chinensis* cv. *Hongyang*. *the Plant Journal*, 2019, 99: 359-378.
	AcMYB10	TAATAATCACTTGGTGTAGTGTAGG	GCAGACTCAACTCCATCTAATATTT	Peng Y. et al. Differential regulation of the anthocyanin profile in purple kiwifruit (*Actinidia* species). *Horticulture Research*, 2019, 6(1): 3.
Promoter cloning	*ProAcF3GT*	CTTGGACGAACCAGTGAG	AATGTACCGACAAGGAGC	Yu, M. et al. Light-and temperature-induced expression of an R2R3-MYB gene regulates anthocyanin biosynthesis in red-fleshed kiwifruit. *International Journal of Molecular Sciences*, 2019, 20, 5228.
	ProAcLDOX	GGGCATGATGGTTGGTTA	TACAGACGGAAGGCGACA	

>pAcF3GT-1058

TGGACGAACCAGTGAGTACATATATATACATGTATATGGAGGAAGAGAATAGTTTAATTTAGAAACA
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> pAcLDOX-1500

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Figure S1. The promoter sequences of *AcF3GT* and *AcLDOX*

Note: cis-acting elements are indicated in green.

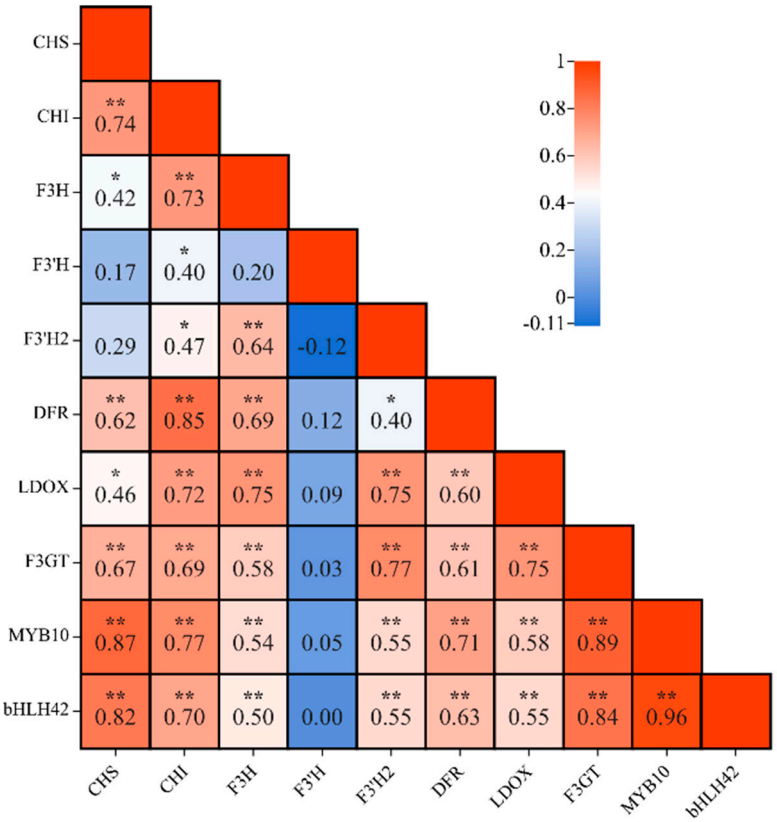

Figure S2. Correlation analysis of gene expression between anthocyanin synthesis genes and regulatory genes.

Note: * and ** represent statistical significance at $p \leq 0.05$ and $p \leq 0.01$ levels, respectively.

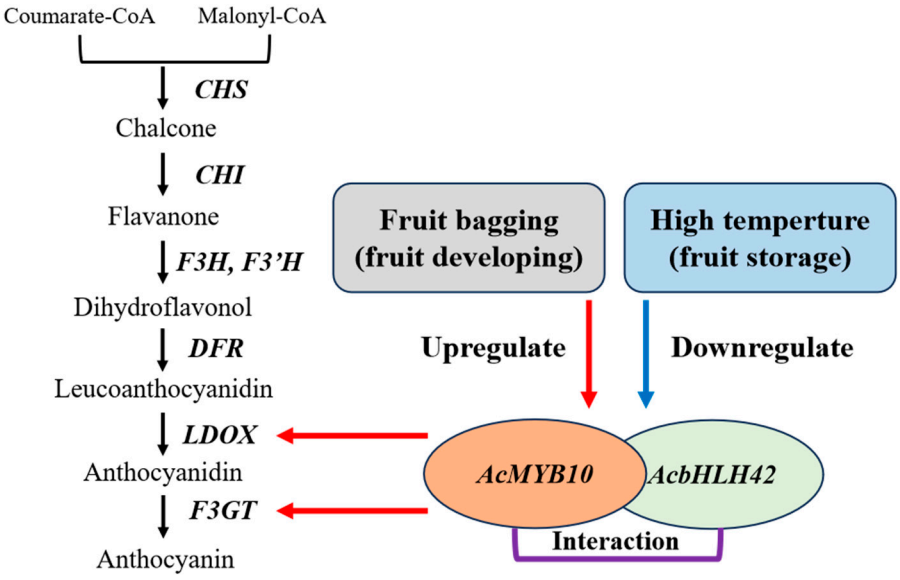

Figure S3. Regulation model of anthocyanin accumulation pathway in bagging and storage of kiwifruit.