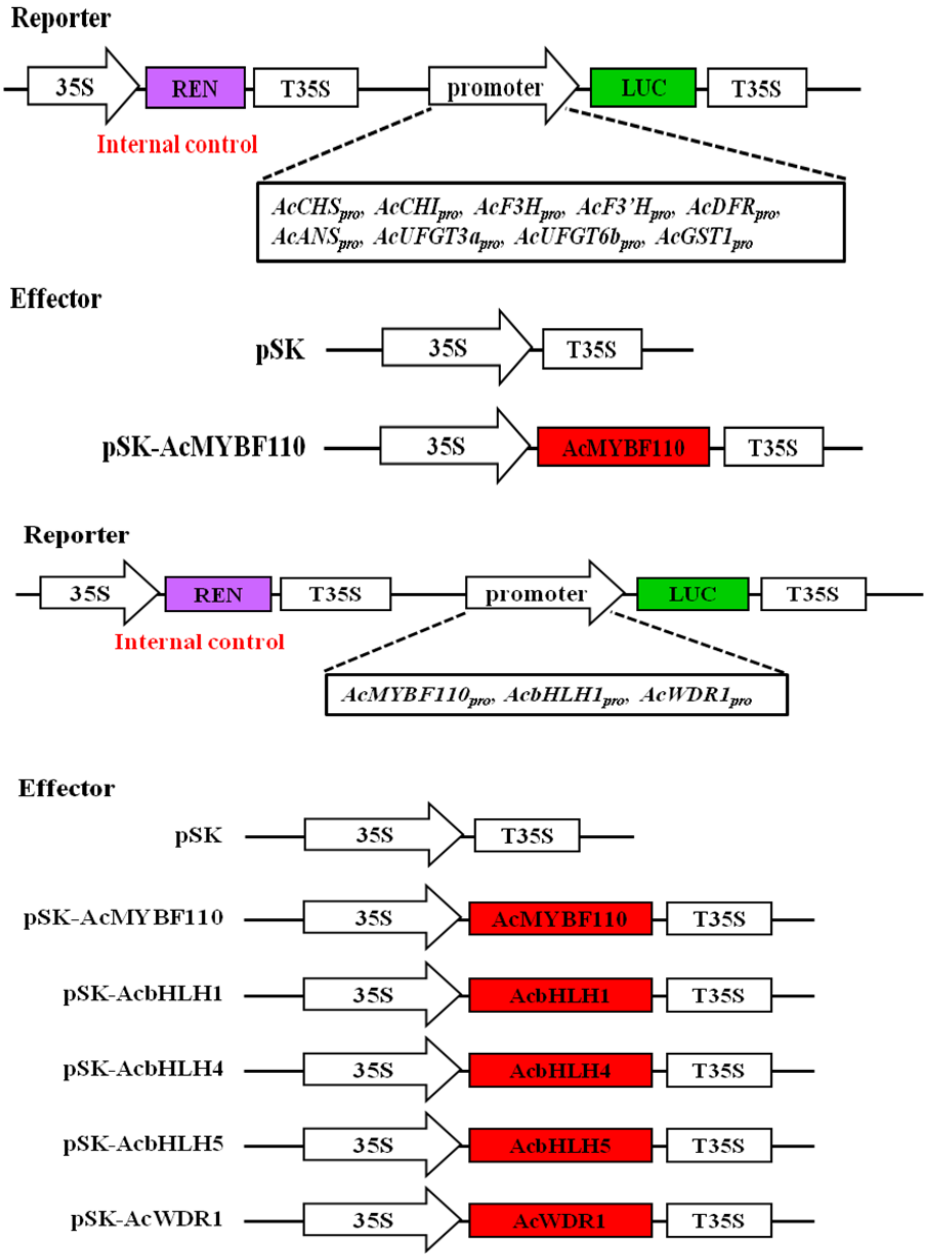

Fig. S1 Schematic diagrams of vectors used for the dual-luciferase assay.

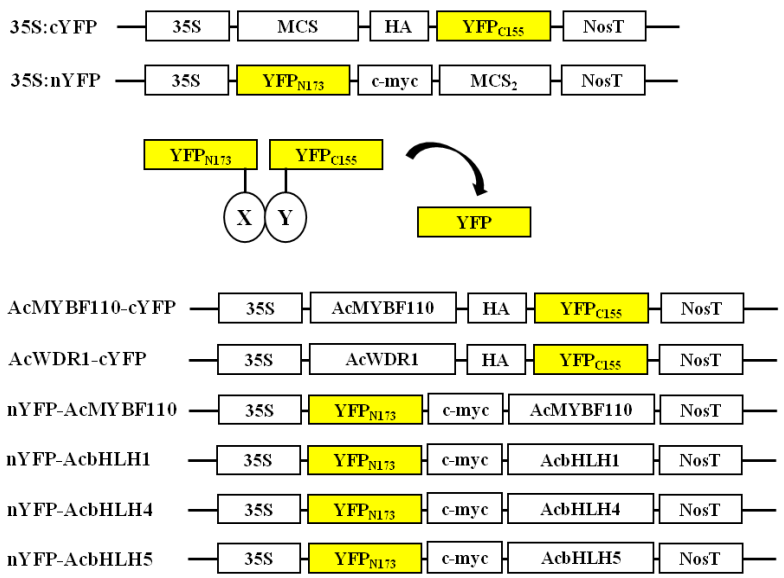

Fig. S2 Schematic diagrams of vectors used for the BiFC assay.

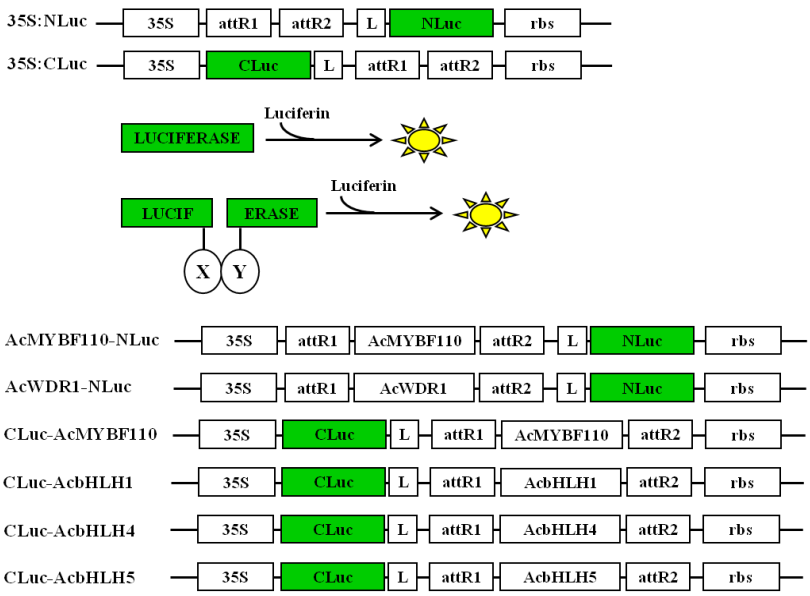

Fig. S3 Schematic diagrams of vectors used for the firefly luciferase complementation assay.

Fig. S4 GUS staining of *A. arguta* fruit injected with 35S or 35S:GUS at 48 h after injection.

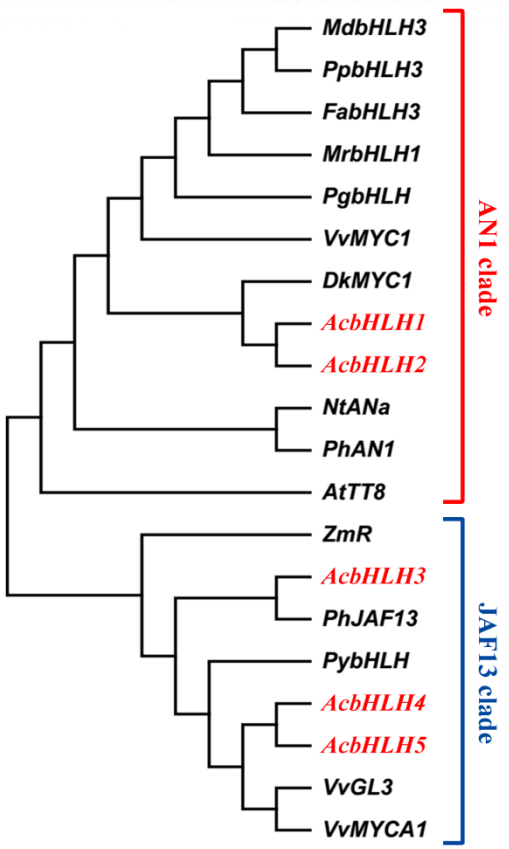

Fig. S5 Phylogenetic analyses of selected plants anthocyanin regulating bHLH transcription factors and putative kiwifruit factors.

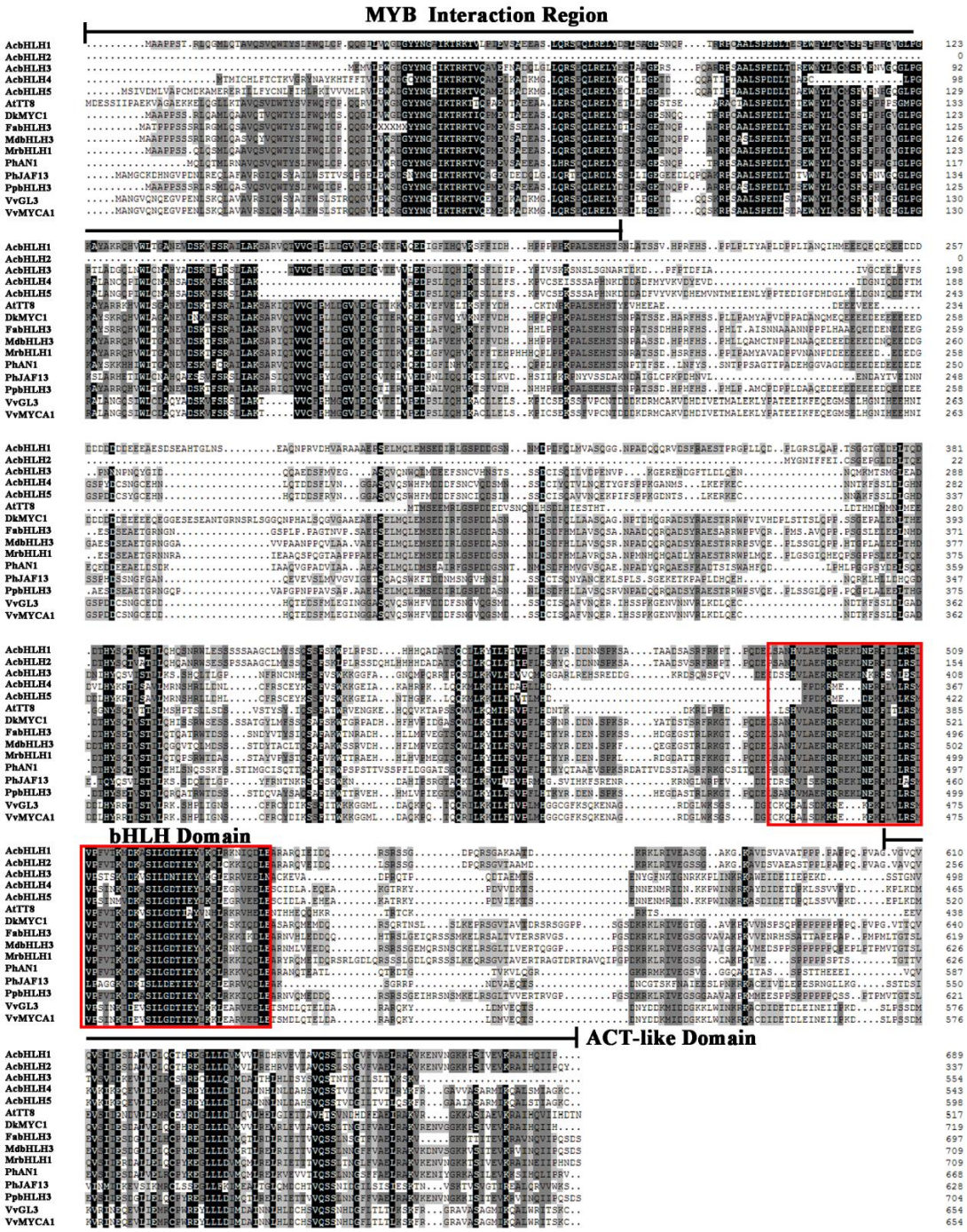

Fig. S6 Amino acid sequences alignment of AcbHLHs and other plant anthocyanin promoting bHLHs.

Fig. S7 Alignment of *AcbHLH1* and *AcbHLH42* sequences.

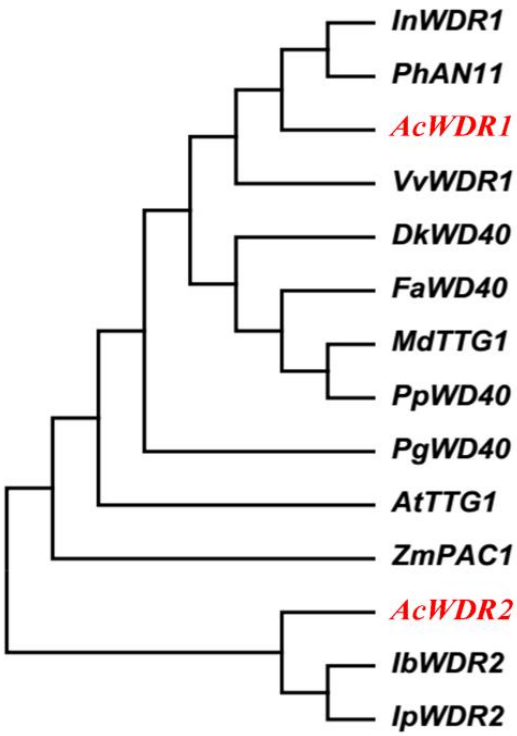

Fig. S8 Phylogenetic analyses of selected plants anthocyanin regulating WD40 transcription factors and putative kiwifruit factor *AcWDRs*.

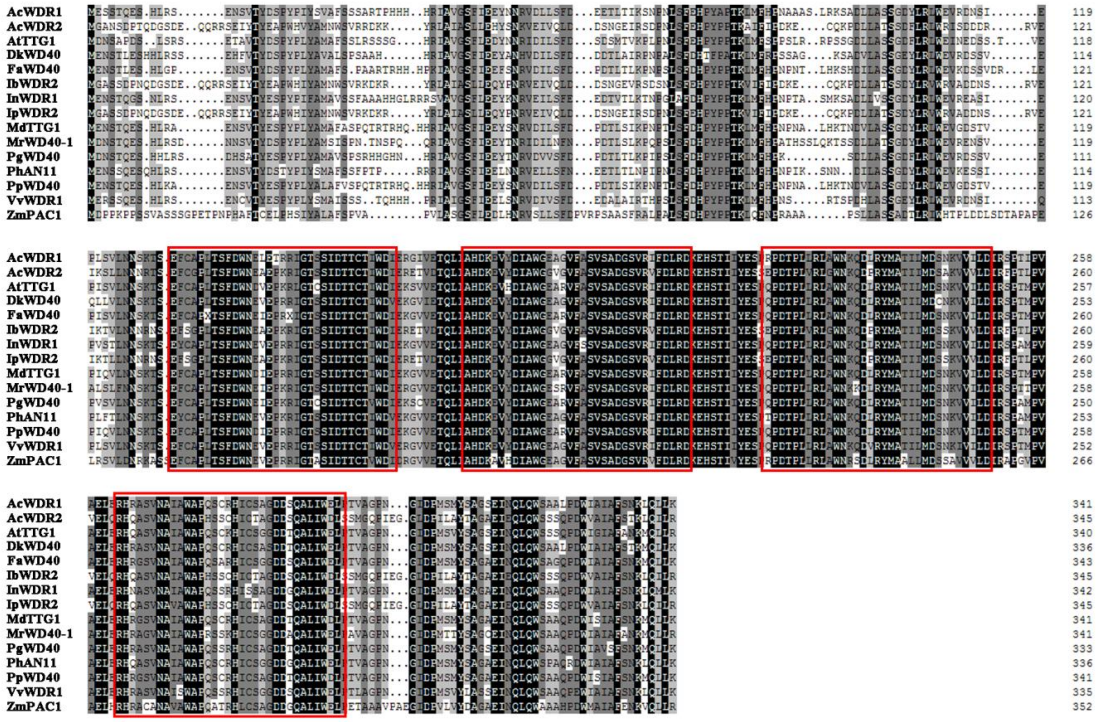

Fig. S9 Amino acid sequences alignment of AcWDRs and other plant anthocyanin promoting WD40. Red boxes indicate four WD motifs.

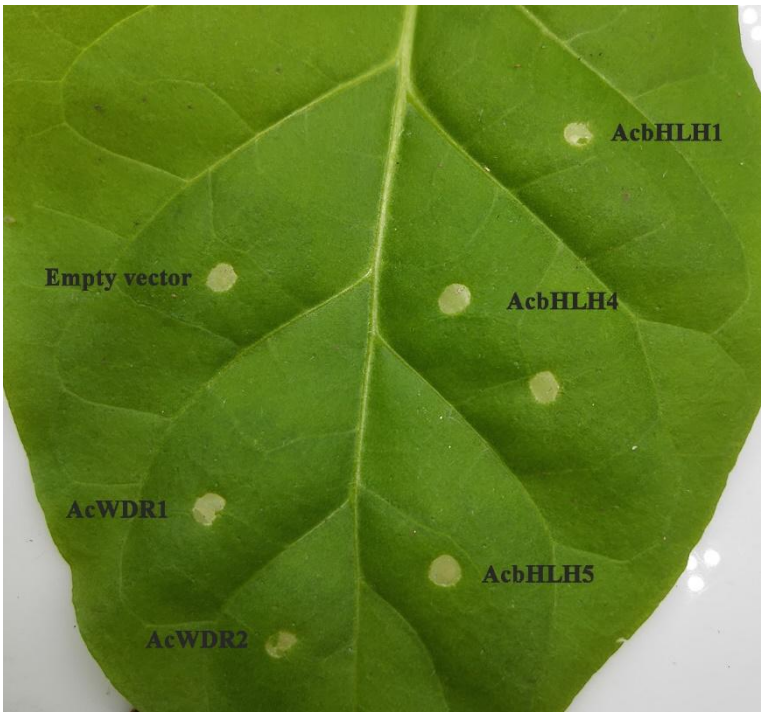

Fig. S10 The phenotype of tobacco leaves 7 days after infiltration with empty vector, *AcbHLH1*, *AcbHLH4*, *AcbHLH5*, *AcWDR1* and *AcWDR2*.

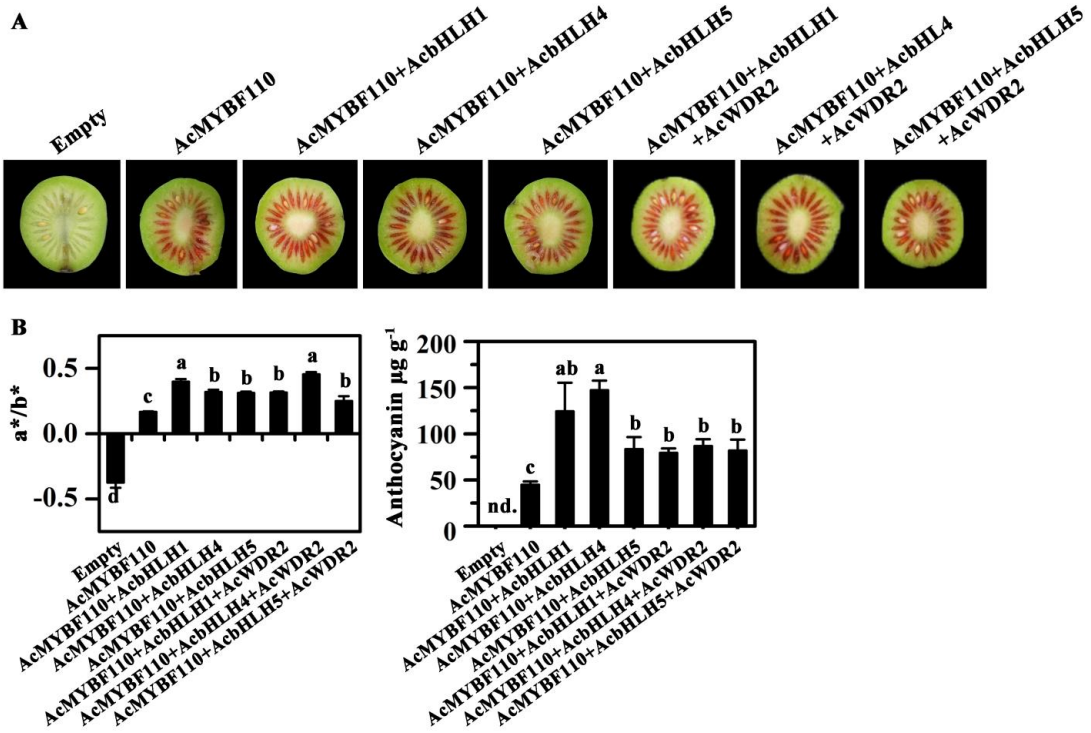

Fig. S11 The phenotype (A), color value (B) and anthocyanin contents (C) of *A. arguta* 10 days after infiltration with *AcMYBF110*, *AcbHLH1/4/5* and *AcWDR2*. Error bars show the SEs of the means (n = 3). Lowercase letters indicate significant differences at P< 0.05 (one-way ANOVA tests).