

Supplementary Material: Characterization of Starch Degradation Related Genes in Postharvest Kiwifruit

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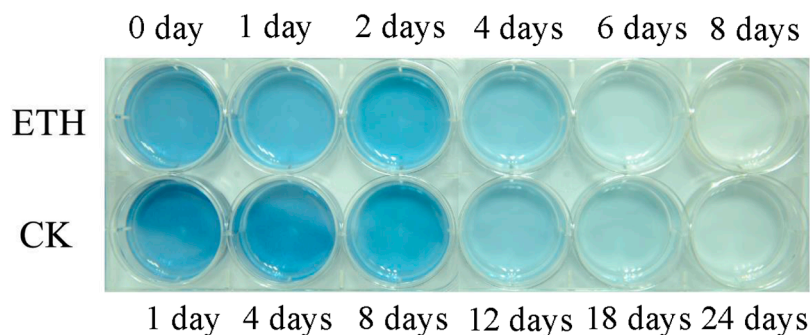


Figure S1. Staining of extracted starch from kiwifruit. Extraction of starch was conducted according to the method described by Stevenson et al. [11] and the **blue** color was indicated by I₂-KI. Intensity of the **blue** color indicated the starch content.

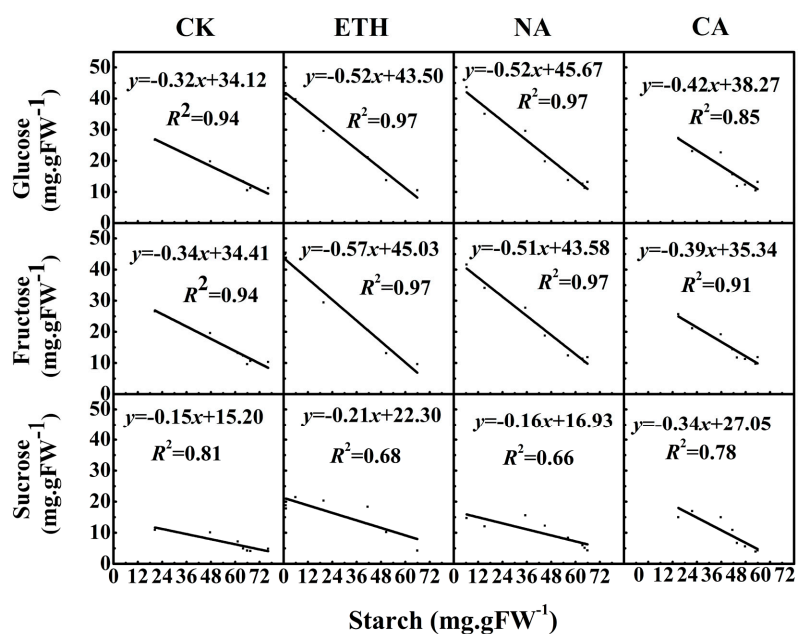


Figure S2. Linear correlation analysis between starch content and soluble sugars. The data used in this figure are same to Figures 2, 3 and 5 in the manuscript. R^2 values were calculated with Microsoft Excel.

Table S1. Primers used for gene amplification.

Gene	Forward Primer (5'-3')	Reverse Primer (5'-3')
<i>AdAMY1</i>	ATGACCACCAATTTTCTCAGCTTCG	CGATCTTGAAACCTTATTCCACCTAA
<i>AdAMY2</i>	ATGACCGTTAACATTCCCTCCG	GATACGCAGTATGGCACAAGTAA
<i>AdAMY3</i>	ATGCCGACAGTACTCTAGAGCCG	GCAGCACATGTTACCTTGTTTGA
<i>AdBAM1</i>	ATGACTACGGAGATGCAGAGATTGG	CTGCTGGAGGTGGGAGAAGAAGAAGTGA
<i>AdBAM2L</i>	ATGGCGATTCGTCGCCCTAAACTGTTC	CTCCCTCTAACGAAAAGGGACTGA
<i>AdBAM3.1</i>	ATGGCTTTGACGCTACGTTCTTCAAC	GATGAAGAAGGCCGCTCTAGTGTAA
<i>AdBAM3.2</i>	ATGGCTTTGACGCTACGTTTC	TGAATAAGAGGTTGTTCGAG
<i>AdBAM3L</i>	ATGGCTTTAACATTACATTGTTCG	AGGAGGCTGCTTTTGTGTAA
<i>AdBAM7</i>	ATGACTACGGAGATGCAGAGATTGG	CTGCTGGAGGTGGGAGAAGAAGAAGTGA
<i>AdBAM8</i>	ATGAACCACCACCCGAACCAAGATC	GTAAATCCATGCATGGTATGACCTGA
<i>AdBAM9</i>	ATGGAGGTTTCGGTGATCGGA	CTCCACATGCAAGTTGCTTAG
<i>AdISA1</i>	ATGGCGTACTTCAGTATATATCGT	CTGGTGATGGTGATGGTGCTTAGTT
<i>AdISA2</i>	ATGGCAACTCTTCCACTATC	GCCAAGAACTAAGTGATTGA
<i>AdISA3</i>	ATGTTCTGATAGTCTGCTTTCAT	GATTCTTCTGGAGGCGAAGCCATGA
<i>AdPU1</i>	ATGTCTCTGTTACGATTATCACCATC	GTGTTTGTGAGTCTAGAAACATCTGA
<i>AdPHS1</i>	ATGGCGACTTCAAGGTTCTCTGCGC	GAACATTAACCCGTTGCATTACCATAG
<i>AdPHS2</i>	ATGGCTACTACAGCAGAAGCC	AGGAGTGCCGCTACCATAA
<i>AdDPE1</i>	ATGGATCTCATCTCATCCAC	GTCAGGGTTCATTTGACTT
<i>AdDPE2</i>	ATGGTCAACTATAGTTTGAT	GAAATTTTAGGATGTATTGC
<i>AdGWD1</i>	ATGAGCAATTCGATAGGGCATAAECTTC	GACCCAGATGTAATATTGATTCTCTC
<i>AdGWD3</i>	ATGGATGCTCTGCGTGATT	AGTTCGTGCTGCTATTCAAT
<i>AdAGL1</i>	ATGTCTGAGTTTGAAGATGCGGCAG	GTACGAGGTGAGGGGAATCTCGTAG
<i>AdAGL2</i>	ATGAGAAGTGTATCTCTGTATCATC	CAATTGGACGATTCAAGTTTATAG
<i>AdAGL3</i>	ATGGAAACTCTCAAAATCACCAAAAAG	TATTGTAAGTAAAGGATTACCCATC

Table S2. Primers used for real-time PCR.

Gene	Enzyme	Forward Primer (5'-3')	Reverse Primer (5'-3')
<i>AdAMY1</i>	α -amylase	CCTCTGGCAATGACTATGCTG	TAGTAATTGCCCGTGCCC
<i>AdAMY2</i>		TTCACGCTGATAGGTTAATGG	CAAGGCATCTATCTGTTATGCC
<i>AdAMY3</i>		GGAAGTGATCATGTCCACGTA	CAGAGGCAAGAGGGTATTGTAA
<i>AdBAM1</i>	β -amylase	CTTGGCCTTTGGTACAGGAA	CTCCTCCATGGCTTTTATGTG
<i>AdBAM2L</i>		CGCAATTATGACATGGTTCTT	GTTTATTTTGGTGGGAGGCA
<i>AdBAM3.1</i>		TCGAGCAGAACGGACCTTTA	GCTGAGTTTGAAGATGGCTG
<i>AdBAM3.2</i>		CCAAGTGGAGTTTGCCCTT	GGAAGATGAAGGAGGCTGCT
<i>AdBAM3L</i>		GTATATATTATATGTGCATGTTT	GAAGCTGACAAAAGCTCATT
<i>AdBAM7</i>		ACGGGGAAGCAGTCTTGTGAT	TAGCACAATCCACTGCTTGG
<i>AdBAM8</i>		AATTGCAGGTGACCGAGAAC	TACCCCATAGACTTGGGTGG
<i>AdBAM9</i>		CTCCACATGCAAGTTGCTTAG	CCTAATCTTCTTGGGAAGC
<i>AdPU1</i>		pullulanase	CCCAAGGACGACTTCTGTGT
<i>AdISA1</i>	isoamylase	GTTCTCGAGTGATGCCATT	AAATAGAAATCCGAGCACCG
<i>AdISA2</i>		GCCAAGAACTAAGTGATTGA	GGATCTATTTTGGAAAGGT
<i>AdISA3</i>		TCTCGAGTCTCCTGGTGATA	GGAACCTTTCCTAACAGTATC
<i>AdPHS1</i>	α -glucan phosphorylase	TGGTGCTCAAGCTCAAGAGA	CTATTTCTTGTGGCAAGG
<i>AdPHS2</i>		ACTGCCACCCCAATCCCAT	ACTGTATTTGCACTGTGCAG
<i>AdGWD1</i>	α -glucan water dikinase	GTTGCGCTTGATTATTCATC	TAGACCTCTGTTCTGGTTC
<i>AdGWD3</i>		CTTGAGAGGTGAATTTTCATG	AGTTCGTGCTGCTATTCAAT
<i>AdDPE1</i>	4- α -glucanotransferase	GTACATGCTGATATTTTCGC	GTCAGGGTTCATTTGACTT
<i>AdDPE2</i>		AGCATCAATTTCTGACCGAG	GAAATTTTAGGATGTATTGC
<i>AdAGL1</i>	α -glucosidase	CCTGTTTCGAAGCAATCGCC	CGGCTCTGAATGTGCAAAATGG
<i>AdAGL2</i>		AATAAATGGAAGGGCGGCT	TTCTACAGTGCTTCAATGGGC
<i>AdAGL3</i>		GGTCTGAAGTTTGGTGG	GCATGTACATTCCAATAATC