

Supplementary Table S1. List of genes involved in the biosynthetic pathways of PAs, as searched from KEGG database. The protein sequences were downloaded from NCBI GenBank database (www.ncbi.nlm.nih.gov), and cross-checked with the reference genomic database of each species using BLASTP.

| Species | Query | Length of query | Subject | Length of subject | Enzymes | Percent identity | Alignments | Alignments/ subject length |
|---------|----------------|-----------------|--|-------------------|---------|------------------|------------|-------------------------------|
| AHP* | XP_015956243.1 | 340 | AH03G35670.1 | 321 | ANR | 99 | 320 | 100 |
| AHP* | XP_015956243.1 | 340 | AH12G33420.1 | 340 | ANR | 98 | 340 | 100 |
| AHP* | XP_015964353.1 | 353 | AH05G08480.1 | 353 | ANS | 100 | 353 | 100 |
| AHP* | XP_015964353.1 | 353 | AH15G04650.1 | 353 | ANS | 100 | 353 | 100 |
| AHP* | XP_020981632.1 | 312 | AH16G40130.1 | 345 | DFR | 90 | 345 | 100 |
| AHP* | XP_015945945.1 | 517 | AH10G23440.1 | 517 | F3'H | 100 | 517 | 100 |
| AHP* | XP_015945945.1 | 517 | AH20G30480.1 | 517 | F3'H | 98 | 517 | 100 |
| AHP* | XP_015952032.1 | 366 | AH01G08350.1 | 366 | F3H | 100 | 366 | 100 |
| AHP* | XP_015952032.1 | 366 | AH11G00580.1 | 366 | F3H | 98 | 366 | 100 |
| AHP* | XP_015967593.1 | 351 | AH05G33160.1 | 351 | LAR | 99 | 351 | 100 |
| AHP* | XP_015967593.1 | 351 | AH15G19390.1 | 351 | LAR | 99 | 351 | 100 |
| ATH | NP_176365.1 | 340 | AT1G61720.1 | 340 | ANR | 100 | 340 | 100 |
| ATH | NP_001154266.1 | 153 | AT4G22870.2 | 153 | ANS | 100 | 153 | 100 |
| ATH | NP_001031700.1 | 356 | AT4G22880.1 | 356 | ANS | 100 | 356 | 100 |
| ATH | NP_199094.1 | 382 | AT5G42800.1 | 382 | DFR | 100 | 382 | 100 |
| ATH | NP_190692.1 | 358 | AT3G51240.1 | 358 | F3H | 100 | 358 | 100 |
| ATH | NP_196416.1 | 513 | AT5G07990.1 | 513 | F3'H | 100 | 513 | 100 |
| FXA* | XP_004309662.1 | 341 | maker-Fvb3-1-augustus-gene-304.62-mRNA-1 | 339 | ANR | 98 | 339 | 100 |
| FXA* | XP_004309662.1 | 341 | maker-Fvb3-2-augustus-gene-20.53-mRNA-1 | 339 | ANR | 98 | 339 | 100 |
| FXA* | XP_004298720.1 | 383 | maker-Fvb5-1-augustus-gene-7.57-mRNA-1 | 383 | ANS | 98 | 383 | 100 |
| FXA* | XP_004298720.1 | 383 | maker-Fvb5-2-augustus-gene-6.69-mRNA-1 | 397 | ANS | 95 | 393 | 99 |
| FXA* | XP_004298720.1 | 383 | maker-Fvb5-3-augustus-gene-266.54-mRNA-1 | 383 | ANS | 97 | 383 | 100 |
| FXA* | XP_004287814.1 | 364 | maker-Fvb1-1-augustus-gene-217.34-mRNA-1 | 364 | F3H | 99 | 364 | 100 |
| FXA* | XP_004287814.1 | 364 | maker-Fvb1-2-augustus-gene-78.37-mRNA-1 | 364 | F3H | 98 | 364 | 100 |
| FXA* | XP_004287814.1 | 364 | maker-Fvb1-3-augustus-gene-64.31-mRNA-1 | 364 | F3H | 98 | 364 | 100 |
| FXA* | XP_004287814.1 | 364 | maker-Fvb1-4-augustus-gene-56.40-mRNA-1 | 364 | F3H | 100 | 364 | 100 |

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|------|----------------|-----|--|-----|--------|-----|-----|-----|
| FXA* | XP_004297144.2 | 350 | maker-Fvb4-1-augustus-gene-155.24-mRNA-1 | 350 | LAR | 97 | 350 | 100 |
| FXA* | XP_004297144.2 | 350 | maker-Fvb4-2-augustus-gene-44.51-mRNA-1 | 350 | LAR | 98 | 350 | 100 |
| FXA* | XP_004297144.2 | 350 | maker-Fvb4-3-augustus-gene-49.40-mRNA-1 | 350 | LAR | 100 | 350 | 100 |
| FXA* | XP_004297144.2 | 350 | maker-Fvb4-4-augustus-gene-44.47-mRNA-1 | 350 | LAR | 98 | 350 | 100 |
| GMX | NP_001241913.2 | 337 | glyma.Wm82.gnm4.ann1.Glyma.08G062000.1 | 337 | ANR | 100 | 337 | 100 |
| GMX | NP_001243072.1 | 338 | glyma.Wm82.gnm4.ann1.Glyma.08G062100.2 | 338 | ANR | 100 | 338 | 100 |
| GMX | NP_001240884.1 | 352 | glyma.Wm82.gnm4.ann1.Glyma.11G027700.1 | 352 | ANS | 100 | 352 | 100 |
| GMX | NP_001239794.1 | 352 | glyma.Wm82.gnm4.ann1.Glyma.01G214200.1 | 352 | ANS | 100 | 352 | 100 |
| GMX | NP_001239696.1 | 339 | glyma.Wm82.gnm4.ann1.Glyma.02G158700.1 | 339 | DFR | 100 | 339 | 100 |
| GMX | NP_001238612.2 | 348 | glyma.Wm82.gnm4.ann1.Glyma.14G072700.1 | 348 | DFR | 100 | 348 | 100 |
| GMX | NP_001341095.1 | 354 | glyma.Wm82.gnm4.ann1.Glyma.17G252200.3 | 354 | DFR | 100 | 354 | 100 |
| GMX | XP_003520255.1 | 376 | glyma.Wm82.gnm4.ann1.Glyma.02G048600.1 | 376 | F3H | 100 | 376 | 100 |
| GMX | XP_003547939.1 | 372 | glyma.Wm82.gnm4.ann1.Glyma.16G128700.1 | 372 | F3H | 100 | 372 | 100 |
| GMX | XP_003517175.1 | 365 | glyma.Wm82.gnm4.ann1.Glyma.01G166200.1 | 365 | F3H | 100 | 365 | 100 |
| GMX | NP_001236797.1 | 375 | glyma.Wm82.gnm4.ann1.Glyma.02G048400.3 | 375 | F3H | 100 | 375 | 100 |
| GMX | XP_014632702.1 | | | N/A | | | | |
| GMX | NP_001236632.2 | 509 | glyma.Wm82.gnm4.ann1.Glyma.13G072100.1 | 467 | F3`5`H | 99 | 463 | 99 |
| GMX | XP_003525447.1 | 513 | glyma.Wm82.gnm4.ann1.Glyma.05G021800.1 | 513 | F3`H | 100 | 513 | 100 |
| GMX | XP_003525448.1 | 512 | glyma.Wm82.gnm4.ann1.Glyma.05G021900.1 | 512 | F3`H | 100 | 512 | 100 |
| GMX | XP_003525450.1 | 511 | glyma.Wm82.gnm4.ann1.Glyma.05G022100.1 | 511 | F3`H | 100 | 511 | 100 |
| GMX | XP_014624961.2 | 633 | glyma.Wm82.gnm4.ann1.Glyma.17G077700.3 | 519 | F3`H | 99 | 515 | 99 |
| GMX | NP_001237015.1 | 513 | glyma.Wm82.gnm4.ann1.Glyma.06G202300.1 | 513 | F3`H | 100 | 513 | 100 |
| GMX | NP_001352050.1 | 365 | glyma.Wm82.gnm4.ann1.Glyma.20G185700.2 | 257 | LAR | 100 | 257 | 100 |
| GMX | XP_003536310.1 | 363 | glyma.Wm82.gnm4.ann1.Glyma.10G204800.2 | 363 | LAR | 100 | 363 | 100 |
| MDM | NP_001280930.1 | 339 | MD05G1335600 | 339 | ANR | 99 | 339 | 100 |
| MDM | XP_028966264.1 | 339 | MD10G1311100 | 339 | ANR | 100 | 339 | 100 |
| MDM | NP_001280767.1 | 357 | MD06G1071600 | 357 | ANS | 100 | 357 | 100 |
| MDM | NP_001315877.1 | 357 | MD03G1001100 | 410 | ANS | 99 | 357 | 87 |
| MDM | NP_001280868.1 | 348 | MD15G1024100 | 348 | DFR | 100 | 348 | 100 |
| MDM | XP_008377381.2 | 347 | MD08G1028600 | 347 | DFR | 100 | 347 | 100 |

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|-----|----------------|-----|----------------------|-----|--------|-----|-----|-----|
| MDM | NP_001280854.1 | 365 | MD02G1132200 | 365 | F3H | 99 | 365 | 100 |
| MDM | NP_001280883.1 | 365 | MD15G1246200 | 365 | F3H | 100 | 365 | 100 |
| MDM | XP_008374610.1 | 511 | MD06G1201700 | 511 | F3`H | 100 | 511 | 100 |
| MDM | XP_008393217.2 | 511 | MD14G1210700 | 511 | F3`H | 100 | 511 | 100 |
| MDM | NP_001280789.1 | 349 | MD13G1046900 | 422 | LAR | 99 | 349 | 83 |
| MDM | NP_001281043.1 | 354 | MD16G1048500 | 354 | LAR | 100 | 354 | 100 |
| PVU | XP_007159212.1 | 337 | Phvul.002G218600.1.p | 337 | ANR | 100 | 337 | 100 |
| PVU | XP_007159213.1 | 337 | Phvul.002G218700.1.p | 337 | ANR | 100 | 337 | 100 |
| PVU | XP_007158443.1 | 353 | Phvul.002G152700.1.p | 353 | ANS | 100 | 353 | 100 |
| PVU | XP_007160734.1 | 354 | Phvul.001G012700.1.p | 354 | DFR | 100 | 354 | 100 |
| PVU | XP_007160735.1 | 339 | Phvul.001G012800.1.p | 339 | DFR | 100 | 339 | 100 |
| PVU | XP_007145529.1 | 329 | Phvul.007G246200.1.p | 329 | DFR | 100 | 329 | 100 |
| PVU | XP_007156141.1 | 365 | Phvul.003G261900.1.p | 365 | F3H | 100 | 365 | 100 |
| PVU | XP_007146174.1 | 528 | Phvul.006G018800.3.p | 385 | F3`5`H | 99 | 335 | 87 |
| PVU | XP_007146137.1 | 505 | Phvul.006G015400.2.p | 452 | F3`5`H | 100 | 452 | 100 |
| PVU | XP_007155243.1 | 364 | Phvul.003G185500.3.p | 368 | F3`H | 100 | 364 | 99 |
| PVU | XP_007138248 | | | N/A | | | | |
| PVU | XP_007143793.1 | 366 | Phvul.007G102100.1.p | 348 | LAR | 94 | 366 | 105 |
| TCC | XP_007025907.2 | 336 | Thecc.06G207800.1.p | 336 | ANR | 100 | 336 | 100 |
| TCC | XP_007040068.2 | 354 | Thecc.03G267700.1.p | 354 | ANS | 99 | 354 | 100 |
| TCC | XP_007017586.2 | 345 | Thecc.08G030500.1.p | 345 | DFR | 99 | 345 | 100 |
| TCC | XP_017985307.1 | | | N/A | | | | |
| TCC | XP_007046698.1 | 364 | Thecc.01G018700.1.p | 364 | F3H | 100 | 364 | 100 |
| TCC | XP_007015255.2 | 508 | Thecc.09G247100.1.p | 508 | F3`5`H | 99 | 508 | 100 |
| TCC | XP_007037548.1 | 507 | Thecc.03G100400.1.p | 507 | F3`H | 100 | 507 | 100 |
| TCC | XP_017971349.1 | 339 | Thecc.02G361400.1.p | 339 | LAR | 100 | 339 | 100 |
| TCC | XP_017973773.1 | 359 | Thecc.03G028300.1.p | 359 | LAR | 100 | 359 | 100 |
| VVI | NP_001268147.1 | 355 | VIT_202s0025g04720.1 | 355 | ANS | 100 | 355 | 100 |
| VVI | NP_001268144.1 | 337 | VIT_218s0001g12800.1 | 375 | DFR | 100 | 337 | 90 |
| VVI | XP_010664947.2 | 402 | VIT_218s0001g12820.1 | 346 | DFR | 100 | 346 | 100 |

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|-----|----------------|-----|----------------------|-----|--------|-----|-----|-----|
| VVI | XP_019071960.1 | 339 | VIT_218s0001g12810.1 | 410 | DFR | 100 | 337 | 82 |
| VVI | NP_001268034.1 | 363 | VIT_204s0023g03370.1 | 363 | F3H | 100 | 363 | 100 |
| VVI | XP_002275563.1 | 358 | VIT_218s0001g14310.1 | 358 | F3H | 100 | 358 | 100 |
| VVI | NP_001268157.1 | 508 | VIT_206s0009g02840.1 | 508 | F3`5`H | 99 | 508 | 100 |
| VVI | XP_003632242.1 | 508 | VIT_206s0009g03110.1 | 508 | F3`5`H | 99 | 508 | 100 |
| VVI | XP_010651674.1 | 404 | VIT_206s0009g02920.1 | 390 | F3`5`H | 99 | 305 | 78 |
| VVI | XP_003632212.1 | 508 | VIT_206s0009g02970.1 | 508 | F3`5`H | 100 | 508 | 100 |
| VVI | XP_010651527.1 | 508 | VIT_206s0009g02840.1 | 508 | F3`5`H | 100 | 508 | 100 |
| VVI | XP_019075997.1 | 442 | VIT_206s0009g02860.1 | 508 | F3`5`H | 97 | 422 | 83 |
| VVI | XP_010651523.1 | 508 | VIT_206s0009g02840.1 | 508 | F3`5`H | 97 | 508 | 100 |
| VVI | XP_002280939.1 | 508 | VIT_206s0009g02860.1 | 508 | F3`5`H | 97 | 508 | 100 |
| VVI | XP_002271739.1 | 513 | VIT_208s0007g05160.1 | 552 | F3`5`H | 100 | 513 | 93 |
| VVI | XP_010651525.1 | 508 | VIT_206s0009g02860.1 | 508 | F3`5`H | 100 | 508 | 100 |
| VVI | XP_003632209.1 | 508 | VIT_206s0009g03110.1 | 508 | F3`5`H | 100 | 508 | 100 |
| VVI | XP_002280662.3 | 509 | VIT_206s0009g03140.1 | 511 | F3`5`H | 100 | 509 | 100 |
| VVI | NP_001268164.1 | 508 | VIT_206s0009g02840.1 | 508 | F3`5`H | 97 | 508 | 100 |
| VVI | NP_001267916.1 | 509 | VIT_217s0000g07200.1 | 509 | F3`H | 99 | 509 | 100 |
| VVI | XP_002284151.1 | 509 | VIT_217s0000g07210.1 | 358 | F3`H | 100 | 358 | 100 |
| VVI | NP_001268089.1 | 362 | VIT_217s0000g04150.2 | 358 | LAR | 98 | 362 | 101 |
| VVI | NP_001267887.1 | 346 | VIT_201s0011g02960.1 | 346 | LAR | 100 | 346 | 100 |

AHP*, FXA*: The genes had been reported from the relative wild species of strawberry (*Fragaria x vesca*) and peanut (*Arachis duranensis*) in KEGG database.

PAs: proanthocyanidins, NCBI: National Center for Biotechnology Information, KEGG: Kyoto Encyclopedia of Genes and Genomes.

Supplementary Table S2. Identification of orthologous genes involved in PAs biosynthetic pathways A total of 108 genes were detected in the eight species. Protein sequences were downloaded from the NCBI GenBank database (www.ncbi.nlm.nih.gov), and orthologs were searched based on sequence identity from the reference genomic database of each species using BLASTP.

| Species of query | Query | Length of query | Species of DB | Subject | Length of DB | Name of enzyme | Percent identity | Alignments | Alignments/subject length |
|------------------|----------------|-----------------|---------------|--|--------------|----------------|------------------|------------|---------------------------|
| GMX | NP_001341095.1 | 354 | AHP | AH16G40140.1 | 230 | DFR | 74 | 225 | 98 |
| MDM | NP_001280930.1 | 339 | CSS | TEA009266.1 | 349 | ANR | 79 | 333 | 95 |
| TCC | XP_007025907.2 | 336 | CSS | TEA022960.1 | 341 | ANR | 81 | 340 | 100 |
| VVI | NP_001268147.1 | 355 | CSS | TEA010322.1 | 307 | ANS | 85 | 307 | 100 |
| TCC | XP_007040068.2 | 354 | CSS | TEA015762.1 | 357 | ANS | 77 | 316 | 89 |
| TCC | XP_007040068.2 | 354 | CSS | TEA015769.1 | 575 | ANS | 82 | 346 | 60 |
| VVI | XP_019071960.1 | 339 | CSS | TEA023829.1 | 344 | DFR | 68 | 322 | 94 |
| VVI | XP_019071960.1 | 339 | CSS | TEA024758.1 | 343 | DFR | 69 | 334 | 97 |
| MDM | NP_001280868.1 | 348 | CSS | TEA032730.1 | 334 | DFR | 77 | 325 | 97 |
| VVI | XP_010651525.1 | 508 | CSS | TEA013315.1 | 486 | F3`5`H | 78 | 509 | 105 |
| VVI | XP_002271739.1 | 513 | CSS | TEA026294.1 | 506 | F3`5`H | 76 | 502 | 99 |
| VVI | XP_002271739.1 | 513 | CSS | TEA026296.1 | 506 | F3`5`H | 76 | 502 | 99 |
| VVI | XP_003632209.1 | 508 | CSS | TEA034021.1 | 470 | F3`5`H | 66 | 503 | 107 |
| VVI | XP_010651525.1 | 508 | CSS | TEA034051.1 | 507 | F3`5`H | 67 | 502 | 99 |
| VVI | NP_001267916.1 | 509 | CSS | TEA006847.1 | 518 | F3`H | 80 | 516 | 100 |
| VVI | XP_002275563.1 | 358 | CSS | TEA023790.1 | 368 | F3H | 91 | 332 | 90 |
| GMX | XP_003520255.1 | 376 | CSS | TEA034016.1 | 320 | F3H | 77 | 123 | 38 |
| VVI | NP_001268089.1 | 362 | CSS | TEA021535.1 | 398 | LAR | 70 | 326 | 82 |
| TCC | XP_017971349.1 | 339 | CSS | TEA026458.1 | 326 | LAR | 71 | 316 | 97 |
| TCC | XP_017971349.1 | 339 | CSS | TEA027582.1 | 334 | LAR | 70 | 339 | 101 |
| MDM | NP_001280868.1 | 348 | FXA | maker-Fvb2-1-augustus-gene-255.45-mRNA-1 | 350 | DFR | 84 | 348 | 99 |
| MDM | NP_001280868.1 | 348 | FXA | maker-Fvb2-3-augustus-gene-33.39-mRNA-1 | 341 | DFR | 82 | 328 | 96 |
| MDM | NP_001280868.1 | 348 | FXA | maker-Fvb2-4-snap-gene-258.87-mRNA-1 | 355 | DFR | 80 | 328 | 92 |
| MDM | NP_001280868.1 | 348 | FXA | snap_masked-Fvb2-3-processed-gene-33.26-mRNA-1 | 368 | DFR | 81 | 366 | 99 |

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|-----|----------------|-----|-----|--|-----|--------|----|-----|-----|
| MDM | XP_008393217.2 | 511 | FXA | augustus_masked-Fvb5-2-processed-gene-78.0-mRNA-1 | 794 | F3`H | 85 | 501 | 63 |
| MDM | XP_008393217.2 | 511 | FXA | maker-Fvb5-1-augustus-gene-87.57-mRNA-1 | 512 | F3`H | 84 | 513 | 100 |
| MDM | XP_008393217.2 | 511 | FXA | snap_masked-Fvb5-3-processed-gene-202.30-mRNA-1 | 608 | F3`H | 76 | 323 | 53 |
| MDM | NP_001280930.1 | 339 | PDU | Prudu_010859_v1.0 | 624 | ANR | 90 | 339 | 54 |
| MDM | NP_001280767.1 | 357 | PDU | Prudu_014083_v1.0 | 381 | ANS | 92 | 357 | 94 |
| MDM | XP_008377381.2 | 347 | PDU | Prudu_003295_v1.0 | 344 | DFR | 86 | 344 | 100 |
| TCC | XP_017973773.1 | 359 | PDU | Prudu_015133_v1.0 | 337 | LAR | 69 | 330 | 98 |
| VVI | XP_019075997.1 | 442 | VCC | augustus_masked-VaccDscf1-processed-gene-340.3-mRNA-1 | 813 | F3`5`H | 68 | 409 | 50 |
| MDM | NP_001280930.1 | 339 | VCC | maker-VaccDscf133-augustus-gene-0.14-mRNA-1 | 333 | ANR | 82 | 332 | 100 |
| MDM | NP_001280930.1 | 339 | VCC | maker-VaccDscf15-augustus-gene-178.21-mRNA-1 | 333 | ANR | 82 | 332 | 100 |
| MDM | NP_001280930.1 | 339 | VCC | maker-VaccDscf19-augustus-gene-256.19-mRNA-1 | 333 | ANR | 81 | 332 | 100 |
| MDM | NP_001280930.1 | 339 | VCC | maker-VaccDscf24-augustus-gene-201.24-mRNA-1 | 355 | ANR | 77 | 354 | 100 |
| TCC | XP_007040068.2 | 354 | VCC | maker-VaccDscf22-augustus-gene-131.24-mRNA-1 | 362 | ANS | 82 | 355 | 98 |
| TCC | XP_007040068.2 | 354 | VCC | maker-VaccDscf43-augustus-gene-236.29-mRNA-1 | 360 | ANS | 82 | 355 | 99 |
| TCC | XP_007040068.2 | 354 | VCC | maker-VaccDscf46-augustus-gene-11.23-mRNA-1 | 360 | ANS | 82 | 355 | 99 |
| VVI | NP_001268144.1 | 337 | VCC | augustus_masked-VaccDscf13-processed-gene-166.8-mRNA-1 | 345 | DFR | 79 | 330 | 96 |
| VVI | XP_019071960.1 | 339 | VCC | augustus_masked-VaccDscf1613-processed-gene-0.0-mRNA-1 | 336 | DFR | 71 | 336 | 100 |
| VVI | NP_001268144.1 | 337 | VCC | augustus_masked-VaccDscf32-processed-gene-199.0-mRNA-1 | 363 | DFR | 75 | 348 | 96 |
| VVI | NP_001268144.1 | 337 | VCC | augustus_masked-VaccDscf42-processed-gene-96.9-mRNA-1 | 363 | DFR | 75 | 348 | 96 |
| VVI | XP_019071960.1 | 339 | VCC | maker-VaccDscf12-snap-gene-66.28-mRNA-1 | 695 | DFR | 72 | 336 | 48 |
| TCC | XP_007017586.2 | 345 | VCC | maker-VaccDscf30-augustus-gene-208.37-mRNA-1 | 243 | DFR | 80 | 221 | 91 |
| VVI | XP_019075997.1 | 442 | VCC | augustus_masked-VaccDscf1-processed-gene-55.4-mRNA-1 | 211 | F3`5`H | 82 | 211 | 100 |
| VVI | XP_002271739.1 | 513 | VCC | augustus_masked-VaccDscf21-processed-gene- | 508 | F3`5`H | 72 | 512 | 101 |

| 326.1-mRNA-1 | | | | | | | | | |
|--------------|----------------|-----|-----|---|------|--------|----|-----|-----|
| VVI | XP_019075997.1 | 442 | VCC | augustus_masked-VaccDscaff26-processed-gene-34.8-mRNA-1 | 375 | F3`5`H | 82 | 211 | 56 |
| VVI | NP_001268164.1 | 508 | VCC | maker-VaccDscaff1-augustus-gene-56.30-mRNA-1 | 333 | F3`5`H | 77 | 333 | 100 |
| VVI | XP_003632212.1 | 508 | VCC | maker-VaccDscaff1-snap-gene-55.44-mRNA-1 | 1440 | F3`5`H | 77 | 512 | 36 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff10-augustus-gene-348.25-mRNA-1 | 512 | F3`5`H | 76 | 510 | 100 |
| VVI | XP_003632212.1 | 508 | VCC | maker-VaccDscaff10-augustus-gene-349.23-mRNA-1 | 512 | F3`5`H | 76 | 512 | 100 |
| VVI | XP_019075997.1 | 442 | VCC | maker-VaccDscaff10-augustus-gene-94.16-mRNA-1 | 455 | F3`5`H | 68 | 420 | 92 |
| VVI | NP_001268164.1 | 508 | VCC | maker-VaccDscaff10-snap-gene-348.34-mRNA-1 | 1499 | F3`5`H | 76 | 512 | 34 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff11-augustus-gene-60.22-mRNA-1 | 512 | F3`5`H | 72 | 512 | 100 |
| VVI | XP_003632242.1 | 508 | VCC | maker-VaccDscaff11-snap-gene-61.32-mRNA-1 | 461 | F3`5`H | 69 | 510 | 111 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff15-augustus-gene-67.31-mRNA-1 | 512 | F3`5`H | 73 | 512 | 100 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff15-augustus-gene-68.25-mRNA-1 | 516 | F3`5`H | 73 | 510 | 99 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff15-augustus-gene-68.26-mRNA-1 | 516 | F3`5`H | 73 | 510 | 99 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff19-augustus-gene-162.21-mRNA-1 | 512 | F3`5`H | 73 | 512 | 100 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff19-augustus-gene-162.22-mRNA-1 | 510 | F3`5`H | 73 | 510 | 100 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff24-augustus-gene-335.35-mRNA-1 | 512 | F3`5`H | 73 | 512 | 100 |
| VVI | XP_003632209.1 | 508 | VCC | maker-VaccDscaff24-augustus-gene-336.30-mRNA-1 | 510 | F3`5`H | 73 | 510 | 100 |
| VVI | XP_002271739.1 | 513 | VCC | maker-VaccDscaff26-augustus-gene-318.27-mRNA-1 | 508 | F3`5`H | 72 | 512 | 101 |
| VVI | XP_010651674.1 | 404 | VCC | maker-VaccDscaff26-snap-gene-34.47-mRNA-1 | 183 | F3`5`H | 71 | 191 | 104 |
| VVI | XP_003632212.1 | 508 | VCC | maker-VaccDscaff26-snap-gene-34.48-mRNA-1 | 1013 | F3`5`H | 77 | 512 | 51 |
| VVI | XP_002271739.1 | 513 | VCC | maker-VaccDscaff29-augustus-gene-305.28-mRNA-1 | 508 | F3`5`H | 72 | 512 | 101 |
| VVI | XP_019075997.1 | 442 | VCC | maker-VaccDscaff29-augustus-gene-34.34-mRNA-1 | 211 | F3`5`H | 81 | 211 | 100 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff29-snap-gene-34.40-mRNA-1 | 632 | F3`5`H | 73 | 330 | 52 |
| VVI | XP_003632212.1 | 508 | VCC | maker-VaccDscaff5-augustus-gene-36.29-mRNA-1 | 601 | F3`5`H | 76 | 512 | 85 |
| VVI | XP_019075997.1 | 442 | VCC | maker-VaccDscaff5-augustus-gene-37.34-mRNA-1 | 215 | F3`5`H | 80 | 171 | 80 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff5-augustus-gene-37.35-mRNA-1 | 512 | F3`5`H | 77 | 510 | 100 |
| VVI | XP_003632212.1 | 508 | VCC | maker-VaccDscaff5-augustus-gene-37.39-mRNA-1 | 512 | F3`5`H | 76 | 512 | 100 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff5-augustus-gene-49.26-mRNA-1 | 511 | F3`5`H | 76 | 510 | 100 |
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscaff5-snap-gene-37.45-mRNA-1 | 1232 | F3`5`H | 76 | 510 | 41 |

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|-----|----------------|-----|-----|---|------|--------|----|-----|-----|
| TCC | XP_007015255.2 | 508 | VCC | maker-VaccDscf8-augustus-gene-360.23-mRNA-1 | 512 | F3'5'H | 77 | 510 | 100 |
| VVI | XP_003632212.1 | 508 | VCC | maker-VaccDscf8-augustus-gene-361.35-mRNA-1 | 512 | F3'5'H | 78 | 512 | 100 |
| VVI | XP_003632212.1 | 508 | VCC | maker-VaccDscf8-snap-gene-360.28-mRNA-1 | 1021 | F3'5'H | 77 | 512 | 50 |
| VVI | XP_003632212.1 | 508 | VCC | maker-VaccDscf8-snap-gene-361.42-mRNA-1 | 537 | F3'5'H | 76 | 512 | 95 |
| VVI | XP_003632242.1 | 508 | VCC | snap_masked-VaccDscf5-processed-gene-318.17-mRNA-1 | 388 | F3'5'H | 69 | 411 | 106 |
| VVI | XP_019075997.1 | 442 | VCC | snap_masked-VaccDscf8-processed-gene-361.12-mRNA-1 | 176 | F3'5'H | 82 | 176 | 100 |
| VVI | NP_001267916.1 | 509 | VCC | maker-VaccDscf13-augustus-gene-238.27-mRNA-1 | 533 | F3'H | 81 | 514 | 96 |
| VVI | NP_001267916.1 | 509 | VCC | maker-VaccDscf30-augustus-gene-161.25-mRNA-1 | 516 | F3'H | 80 | 514 | 100 |
| VVI | NP_001267916.1 | 509 | VCC | maker-VaccDscf32-augustus-gene-159.26-mRNA-1 | 536 | F3'H | 80 | 519 | 97 |
| VVI | NP_001267916.1 | 509 | VCC | maker-VaccDscf42-augustus-gene-154.36-mRNA-1 | 516 | F3'H | 80 | 514 | 100 |
| VVI | NP_001268034.1 | 363 | VCC | augustus_masked-VaccDscf42-processed-gene-20.3-mRNA-1 | 359 | F3H | 85 | 363 | 101 |
| VVI | NP_001268034.1 | 363 | VCC | maker-VaccDscf13-augustus-gene-41.36-mRNA-1 | 359 | F3H | 85 | 363 | 101 |
| VVI | NP_001268034.1 | 363 | VCC | maker-VaccDscf16-augustus-gene-381.32-mRNA-1 | 366 | F3H | 90 | 346 | 95 |
| VVI | NP_001268034.1 | 363 | VCC | maker-VaccDscf30-augustus-gene-297.38-mRNA-1 | 359 | F3H | 85 | 363 | 101 |
| VVI | NP_001268034.1 | 363 | VCC | maker-VaccDscf31-augustus-gene-324.32-mRNA-1 | 366 | F3H | 87 | 346 | 95 |
| VVI | NP_001268034.1 | 363 | VCC | maker-VaccDscf32-augustus-gene-323.35-mRNA-1 | 359 | F3H | 85 | 363 | 101 |
| VVI | NP_001268034.1 | 363 | VCC | snap_masked-VaccDscf18-processed-gene-15.24-mRNA-1 | 373 | F3H | 85 | 353 | 95 |
| VVI | NP_001268034.1 | 363 | VCC | snap_masked-VaccDscf7-processed-gene-48.23-mRNA-1 | 373 | F3H | 86 | 353 | 95 |
| TCC | XP_017971349.1 | 339 | VCC | maker-VaccDscf14-augustus-gene-252.26-mRNA-1 | 351 | LAR | 72 | 333 | 95 |
| TCC | XP_017971349.1 | 339 | VCC | maker-VaccDscf19-augustus-gene-121.20-mRNA-1 | 347 | LAR | 72 | 347 | 100 |
| TCC | XP_017971349.1 | 339 | VCC | maker-VaccDscf2-augustus-gene-298.20-mRNA-1 | 351 | LAR | 72 | 333 | 95 |
| TCC | XP_017971349.1 | 339 | VCC | maker-VaccDscf20-augustus-gene-119.25-mRNA-1 | 350 | LAR | 73 | 347 | 99 |
| TCC | XP_017971349.1 | 339 | VCC | maker-VaccDscf25-augustus-gene-293.25-mRNA-1 | 351 | LAR | 72 | 333 | 95 |
| TCC | XP_017971349.1 | 339 | VCC | maker-VaccDscf28-augustus-gene-227.23-mRNA-1 | 350 | LAR | 72 | 347 | 99 |
| TCC | XP_017971349.1 | 339 | VCC | maker-VaccDscf28-augustus-gene-232.26-mRNA-1 | 350 | LAR | 73 | 347 | 99 |

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| TCC | XP_017971349.1 | 339 | VCC | maker-VaccDscaff3-augustus-gene-115.16-mRNA-1 | 352 | LAR | 72 | 334 | 95 |
| VVI | NP_001268089.1 | 362 | VCC | maker-VaccDscaff35-augustus-gene-247.32-mRNA-1 | 341 | LAR | 67 | 346 | 101 |
| VVI | NP_001268089.1 | 362 | VCC | maker-VaccDscaff36-augustus-gene-103.16-mRNA-1 | 351 | LAR | 68 | 351 | 100 |
| TCC | XP_017973773.1 | 359 | VCC | maker-VaccDscaff4-augustus-gene-340.14-mRNA-1 | 203 | LAR | 74 | 182 | 90 |
| VVI | NP_001268089.1 | 362 | VCC | maker-VaccDscaff9-augustus-gene-315.13-mRNA-1 | 346 | LAR | 69 | 346 | 100 |

PAs: proanthocyanidins, KEGG: Kyoto Encyclopedia of Genes and Genomes.