|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Amplicon | Leaf PCR eff. | GC% | Tm | Primer length | Sequence (5'->3') | Gene symbol |
| Tm | **length** | **SD** | **Mean %** |
| - | 78.7 | - | - | 47.847.8 | 67.066.2 | 2323 | **F:** CGGCATGATTAGCAAGGAAGAGT**R:** GCGTCAGGATGGAAGACAGATAA | *ALCBL2\** |
| 79.8 | 139 | 0.016 | 94.1 | 50.057.9 | 65.766.2 | 2219 | **F:** CGAACGGTGACGGTAAGATAGA**R:** GCTCCAGAGGCCAGAACAA | *AlCBL4.1* |
| 81.4 | 163 | 0.016 | 92.1 | 52.652.6 | 63.062.9 | 1919 | **F:** CAAAGACGGGCTGATTCAC**R:** AGGGTGGAAGATGTTGAGG | *AlCBL4.2* |
| 78.3 | 155 | 0.013 | 92.9 | 41.742.3 | 65.665.6 | 2426 | **F:** TTATTGAACGGCATGAGCTAAAGG**R:** ATTCCACTCCTCTTGATCTATCTTCC | *AlCBL4.3* |
| 96 | 78.8 | 0.019 | 93.7 | 50.050.0 | 64.764.9 | 2220 | **F:** TCTAAGAGGGACAGGCTACATC**R:** ACAGTGCTATCCGACAGACA | *AlCBL4.4* |
| 81.3 | 69 | 0.029 | 92.4 | 47.452.9 | 60.061.1 | 1917 | **F:** GATGGATCTCCCTCAACTT**R:** CGTTCACCGAGAAGCAT | *AlCBL10* |
| 80.5 | 200 | 0.025 | 89.8 | 5048 | 6363 | 2021 | **F:** CTTGGTCTGCTGTTGTCTTG**R:** CACGGTTCACTTATCCATCAC | *AlUBQ* |
| 78.5 | 107 | 0.022 | 93.6 | 5560 | 6363 | 2020 | **F:** ATTCACTGGCTGACCGGATG**R:** GTGCCAAGGGTTGTGAGGTC | *AlRPS3* |
| 80 | 97 | 0.016 | 95.2 | 5045 | 6362.5 | 1820 | **F:** TGCTGTCGGTGTCATCAA**R:** CTTCCATCAAACGCCTCATT | *AlEF1-a* |

**Table S1.** List of primers of *AlCBL* genes used in qPCR analysis

 \* Not amplified

**Table S2.** List of primers of *AlCIPK* genes used in qPCR analysis

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| mplicon  | Leaf PCR eff. | GC% | Tm | Primer length | Sequence (5'->3') | Gene symbol |
| Tm | **length** | **SD** | **Mean %** |
| 81.3 | 156 | 0.030 | 94.5 | 52.950.0 | 59.659.9 | 1718 | **F:** GGCGTGTATCACAGAGA**R:** AGGTGCGATGTAGTTAGG | *AlCIPK1.1* |
| 78.2 | 94 | 0.016 | 85.6 | 47.655.0 | 64.264.7 | 2120 | **F:** TCTCTGAAGACGAAGGAAGGA**R:** GGCTTGAGGTCCCTATGGTA | *AlCIPK1.2* |
| 80.5 | 101 | 0.023 | 93.6 | 50.045.0 | 61.862.0 | 1820 | **F:** AGGGAACATTCGCAAAGG**R:** CATCTTGTGCTTGAGAACCT | *AlCIPK3.1* |
| 80.5 | 62 | 0.024 | 93.7 | 58.855.6 | 64.364.6 | 1718 | **F:** TCCTGTGGCGTCATCCT**R:** ATGTTGGCGTCGTCGAAG | *AlCIPK4* |
| 80.7 | 61 | 0.018 | 89.2 | 64.761.1 | 64.463.4 | 1718 | **F:** CCGCCCGTCATCATCAC**R:** CGTCTTCCTCCGACCATC | *AlCIPK5* |
| 77.8 | 138 | 0.024 | 90.0 | 50.045.8 | 67.667.6 | 2224 | **F:** ACACCGCCTCAACAATCATCAC**R:** CAGCATTCACAGACATCACACCTT | *AlCIPK10.2* |
| 80.4 | 128 | 0.024 | 92.8 | 52.450.0 | 64.665.5 | 2122 | **F:** CAGAGTCAAGGAGGCAAGATG**R:** GACAACACCACAAGACCAGATG | *AlCIPK10.6* |
| 82.8 | 86 | 0.015 | 85.5 | 55.652.9 | 59.861.0 | 1817 | **F:** GTGTAGTGAGGAGGGAAG**R:** CTTGAAGACGGCGACTT | *AlCIPK11* |
| 79.5 | 69 | 0.020 | 91.4 | 58.847.4 | 62.662.7 | 1719 | **F:** GCACAGCGTGATGGATG**R:** AATGGTTGAGGAGCAGGAT | *AlCIPK12.1* |
| 80.2 | 55 | 0.029 | 92.3 | 58.855.6 | 62.861.8 | 1718 | **F:** GTCCTCTTCGTGCTCGT**R:** CGTTGTCCAGGTGGTTAC | *AlCIPK12.3* |
| 81.9 | 148 | 0.023 | 93.6 | 58.855.6 | 63.563.5 | 1718 | **F:** GTCACGCCTTCGCTGTA**R:** GCTTCGTCTCGTCACCTT | *AlCIPK23* |
| 77.2 | 75 | 0.024 | 91.6 | 44.060.0 | 67.166.8 | 2520 | **F:** CCAATTATGTTGCTCCTGAGGTGAT**R:** CTCCGCAAGACCAGACATCC | *AlCIPK26* |