

Table S1Selected genes exemplifying significant upregulation (red), downregulation (green), or no significant change.^a

| Locus | Expression | | Fold Change | | <i>p</i> Value ≤ 0.05 ^b | <i>q</i> Value ≤ 0.05 ^b | Weight ≥ 0.02 ≤ -0.02 | VIP ≥ 1.5 | Coefficient ≥ 0.001 ≤ -0.001 | Pass / Fail ^c | Failure criteria ^d |
|------------|------------|-----|---------------|------------------|---------------------------------------|---------------------------------------|-----------------------------|--------------|------------------------------------|-----------------------------|----------------------------------|
| | HVs | TPs | ≥1.50 (up) | ≥-1.50 (down) | | | | | | | |
| PA14_01500 | 8 | 10 | 1.3 | | 0.03 | 1.00 | 0.01 | 0.3 | 0.000 | fail | fc ^e |
| PA14_01510 | 31 | 22 | | -1.41 | 0.00 | 0.02 | -0.01 | 1.2 | -0.001 | fail | fc |
| PA14_01520 | 31 | 31 | 1.00 | | 0.55 | 1.00 | 0.00 | 0.2 | 0.000 | fail | fc |
| PA14_01540 | 112 | 85 | | -1.32 | 0.00 | 0.03 | -0.02 | 1.5 | -0.001 | fail | fc |
| PA14_01550 | 66 | 63 | 0.95 | | 0.71 | 1.00 | 0.00 | 0.1 | 0.000 | fail | fc |
| PA14_01560 | 94 | 138 | 1.47 | | 0.00 | 0.00 | 0.02 | 1.7 | 0.001 | fail | fc |
| PA14_01580 | 89 | 50 | | -1.78 | 0.00 | 0.00 | -0.03 | 2.1 | -0.002 | pass | |
| PA14_01600 | 170 | 116 | | -1.47 | 0.00 | 0.00 | -0.02 | 1.7 | -0.001 | fail | fc |
| PA14_01610 | 110 | 73 | | -1.51 | 0.00 | 0.00 | -0.02 | 1.8 | -0.002 | pass | |
| PA14_01620 | 159 | 137 | | -1.16 | 0.16 | 0.57 | -0.01 | 0.7 | -0.001 | fail | fc |
| PA14_01640 | 12 | 11 | | -1.09 | 0.99 | 1.00 | 0.00 | 0.1 | 0.000 | fail | fc |
| PA14_01660 | 15 | 20 | 1.33 | | 0.00 | 0.00 | 0.02 | 1.4 | 0.001 | fail | fc |
| PA14_01670 | 0 | 0 | 0.00 | 0.00 | 0.54 | 1.00 | 0.00 | 0.3 | 0.000 | fail | fc |
| PA14_01680 | 1 | 0 | 0.00 | 0.00 | 0.16 | 1.00 | -0.01 | 0.5 | 0.000 | fail | fc |
| PA14_01690 | 0 | 0 | 0.00 | 0.00 | 0.00 | 1.00 | -0.01 | 0.8 | -0.001 | fail | fc |
| PA14_02500 | 1 | 3 | 3.00 | | 0.00 | 1.00 | 0.01 | 1.3 | 0.001 | fail | q, w, v |
| PA14_02510 | 2 | 3 | 1.50 | | 0.07 | 1.00 | 0.00 | 0.3 | 0.000 | fail | all |
| PA14_02520 | 626 | 268 | | -2.34 | 0.00 | 0.00 | -0.03 | 2.1 | -0.002 | pass | |
| PA14_02530 | 116 | 174 | 1.50 | | 0.00 | 0.00 | 0.02 | 1.8 | 0.002 | pass | |
| PA14_02550 | 44 | 258 | 5.86 | | 0.00 | 0.00 | 0.03 | 2.2 | 0.002 | pass | |
| PA14_02560 | 5 | 21 | 4.20 | | 0.00 | 0.00 | 0.03 | 2.0 | 0.002 | pass | |
| PA14_02570 | 4 | 24 | 6.00 | | 0.00 | 0.00 | 0.02 | 1.8 | 0.002 | pass | |
| PA14_02580 | 12 | 36 | 3.00 | | 0.00 | 0.00 | 0.03 | 1.9 | 0.002 | pass | |
| PA14_02590 | 6 | 24 | 4.00 | | 0.00 | 0.00 | 0.03 | 2.2 | 0.002 | pass | |
| PA14_03100 | 2 | 5 | 2.50 | | 0.00 | 1.00 | 0.02 | 1.3 | 0.001 | fail | q, v |
| PA14_03110 | 14 | 8 | | -1.75 | 0.00 | 1.00 | -0.01 | 1.1 | -0.001 | fail | q, w, v |
| PA14_03120 | 17 | 17 | 1.00 | | 0.38 | 1.00 | 0.00 | 0.1 | 0.000 | fail | fc |
| PA14_03130 | 8 | 13 | 1.63 | | 0.00 | 1.00 | 0.02 | 1.5 | 0.001 | fail | q |
| PA14_03150 | 22 | 25 | 1.14 | | 0.04 | 0.19 | 0.01 | 0.3 | 0.000 | fail | fc |

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|------------|-----|-----|------|-------|------|------|-------|-----|--------|------|---------|
| PA14_03160 | 36 | 38 | 1.06 | | 0.49 | 1.00 | 0.00 | 0.0 | 0.000 | fail | fc |
| PA14_03163 | 477 | 569 | 1.19 | | 0.00 | 0.01 | 0.02 | 1.2 | 0.001 | fail | fc |
| PA14_03166 | 101 | 149 | 1.48 | | 0.00 | 0.00 | 0.02 | 1.7 | 0.002 | pass | |
| PA14_03170 | 19 | 22 | 1.16 | | 0.01 | 0.06 | 0.01 | 0.6 | 0.001 | fail | fc |
| PA14_03180 | 157 | 143 | | 1.10 | 0.53 | 1.00 | -0.01 | 0.4 | 0.000 | fail | fc |
| PA14_03190 | 93 | 60 | | -1.55 | 0.00 | 0.00 | -0.03 | 2.3 | -0.002 | pass | |
| PA14_03200 | 57 | 39 | | -1.46 | 0.00 | 0.00 | -0.02 | 1.8 | -0.002 | pass | |
| PA14_03210 | 38 | 23 | | -1.65 | 0.00 | 0.00 | -0.02 | 1.8 | -0.002 | pass | |
| PA14_03220 | 43 | 26 | | -1.65 | 0.00 | 0.00 | -0.03 | 2.6 | -0.002 | pass | |
| PA14_03240 | 202 | 189 | | -1.07 | 0.88 | 1.00 | 0.00 | 0.4 | 0.000 | fail | fc |
| PA14_03250 | 64 | 64 | 1.00 | | 0.50 | 1.00 | 0.00 | 0.1 | 0.000 | fail | fc |
| PA14_03265 | 176 | 144 | | -1.22 | 0.01 | 0.08 | -0.01 | 1.1 | -0.001 | fail | fc |
| PA14_03270 | 120 | 108 | | -1.11 | 0.41 | 1.00 | -0.01 | 0.8 | -0.001 | fail | fc |
| PA14_03285 | 50 | 54 | 1.08 | | 0.09 | 0.37 | 0.01 | 0.4 | 0.000 | fail | fc |
| PA14_03290 | 100 | 119 | 1.19 | | 0.01 | 0.06 | 0.01 | 0.6 | 0.001 | fail | fc |
| PA14_03300 | 32 | 39 | 1.22 | | 0.01 | 0.04 | 0.01 | 0.9 | 0.001 | fail | fc |
| PA14_32810 | 4 | 2 | | -2.00 | 0.01 | 1.00 | -0.01 | 1.0 | -0.001 | fail | q, w, v |
| PA14_32820 | 8 | 11 | 1.38 | | 0.00 | 1.00 | 0.01 | 0.7 | 0.001 | fail | fc |
| PA14_32830 | 40 | 24 | | -1.67 | 0.00 | 0.00 | -0.02 | 1.5 | -0.001 | pass | |
| PA14_32840 | 50 | 38 | | -1.32 | 0.00 | 0.02 | -0.01 | 0.7 | -0.001 | fail | fc |
| PA14_32850 | 48 | 38 | | -1.26 | 0.01 | 0.08 | -0.01 | 0.7 | -0.001 | fail | fc |
| PA14_32860 | 20 | 18 | | -1.11 | 0.69 | 1.00 | 0.00 | 0.3 | 0.000 | fail | fc |
| PA14_32880 | 16 | 11 | | -1.45 | 0.00 | 1.00 | -0.02 | 1.6 | -0.001 | fail | q |
| PA14_32890 | 129 | 129 | 1.00 | | 0.86 | 1.00 | 0.00 | 0.2 | 0.000 | fail | fc |
| PA14_32905 | 137 | 59 | | -2.32 | 0.00 | 0.00 | -0.03 | 2.2 | -0.002 | pass | |
| PA14_32930 | 31 | 20 | | -1.55 | 0.00 | 0.00 | -0.02 | 1.7 | -0.001 | pass | |
| PA14_32940 | 15 | 16 | 1.07 | | 0.39 | 1.00 | 0.00 | 0.2 | 0.000 | fail | fc |
| PA14_32950 | 3 | 2 | | -1.50 | 0.37 | 1.00 | -0.01 | 0.4 | 0.000 | fail | q, v |
| PA14_32970 | 5 | 3 | | -1.67 | 0.00 | 1.00 | -0.01 | 1.1 | -0.001 | fail | q, w, v |
| PA14_32985 | 266 | 176 | | -1.51 | 0.00 | 0.00 | -0.02 | 1.8 | -0.002 | pass | |
| PA14_33000 | 220 | 113 | | -1.95 | 0.00 | 0.00 | -0.04 | 2.9 | -0.002 | pass | |
| PA14_33010 | 109 | 63 | | -1.73 | 0.00 | 0.00 | -0.03 | 2.3 | -0.002 | pass | |
| PA14_33030 | 36 | 18 | | -2.00 | 0.00 | 0.00 | -0.04 | 2.7 | -0.002 | pass | |
| PA14_33040 | 51 | 33 | | -1.55 | 0.00 | 0.00 | -0.02 | 1.6 | -0.001 | pass | |
| PA14_33050 | 40 | 50 | 1.25 | | 0.00 | 0.02 | 0.01 | 0.8 | 0.001 | fail | fc |
| PA14_33060 | 9 | 11 | 1.22 | | 0.01 | 1.00 | 0.01 | 0.5 | 0.000 | fail | fc |

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|------------|-----|-----|------|-------|------|------|-------|-----|--------|------|---------|
| PA14_33070 | 8 | 7 | | -1.14 | 0.59 | 1.00 | 0.00 | 0.4 | 0.000 | fail | fc |
| PA14_33080 | 11 | 13 | 1.18 | | 0.05 | 1.00 | 0.01 | 0.3 | 0.000 | fail | fc |
| PA14_36100 | 9 | 4 | | -2.25 | 0.00 | 1.00 | -0.03 | 2.0 | -0.002 | fail | q |
| PA14_36110 | 3 | 1 | | -3.00 | 0.00 | 1.00 | -0.02 | 1.9 | -0.002 | fail | q |
| PA14_36120 | 4 | 3 | | -1.33 | 0.09 | 1.00 | -0.01 | 0.3 | 0.000 | fail | fc |
| PA14_36130 | 2 | 2 | 1.00 | | 0.70 | 1.00 | 0.00 | 0.3 | 0.000 | fail | fc |
| PA14_36150 | 0 | 0 | 0.00 | 0.00 | 0.00 | 1.00 | -0.01 | 0.7 | -0.001 | fail | fc |
| PA14_36170 | 0 | 0 | 0.00 | 0.00 | 0.34 | 1.00 | 0.00 | 0.2 | 0.000 | fail | fc |
| PA14_36180 | 13 | 15 | 1.15 | | 0.03 | 1.00 | 0.01 | 0.5 | 0.000 | fail | fc |
| PA14_36190 | 17 | 10 | | -1.70 | 0.00 | 1.00 | -0.02 | 1.4 | -0.001 | fail | q, v |
| PA14_36200 | 315 | 299 | | -1.05 | 0.74 | 1.00 | 0.00 | 0.0 | 0.000 | fail | fc |
| PA14_36220 | 6 | 9 | 1.50 | | 0.00 | 1.00 | 0.01 | 0.9 | 0.001 | fail | q, w, v |
| PA14_36230 | 6 | 10 | 1.67 | | 0.00 | 1.00 | 0.01 | 0.9 | 0.001 | fail | q, w, v |
| PA14_36250 | 7 | 11 | 1.57 | | 0.00 | 1.00 | 0.01 | 0.9 | 0.001 | fail | q, w, v |
| PA14_36260 | 2 | 2 | 1.00 | | 0.02 | 1.00 | 0.01 | 0.4 | 0.000 | fail | fc |
| PA14_36270 | 25 | 27 | 1.08 | | 0.16 | 0.55 | 0.00 | 0.4 | 0.000 | fail | fc |
| PA14_36280 | 15 | 15 | 1.00 | | 0.43 | 1.00 | 0.00 | 0.2 | 0.000 | fail | fc |
| PA14_36290 | 17 | 31 | 1.82 | | 0.00 | 0.00 | 0.03 | 2.4 | 0.002 | pass | |
| PA14_36300 | 22 | 37 | 1.68 | | 0.00 | 0.00 | 0.03 | 2.0 | 0.002 | pass | |

^aValues were rounded to significant decimal before applying criteria.

^bHVs versus TPs

^cGenes were considered significantly altered in expression if all the criteria were met for q value, VIP (variable importance in projection) score, weight, and coefficient.

^dfc, fold-change; q, q value; w, weight; v, VIP

^efc takes precedence; other criteria not withstanding