

| Gene                                          | A          |          |             |          |          |          | B        |            |          |             |          |          |  |  |
|-----------------------------------------------|------------|----------|-------------|----------|----------|----------|----------|------------|----------|-------------|----------|----------|--|--|
|                                               | Regenerant |          | callus line | Embryo   | Plantlet |          |          | Regenerant |          | callus line | Embryo   | Plantlet |  |  |
|                                               | ENT        | EXP      | Normal      | LEAF     | STEM     | ROOT     | ENT      | EXP        | Normal   | LEAF        | STEM     | ROOT     |  |  |
| Ethylene biosynthetic & transduction pathways | HBA001     | 8.56E-02 | 2.44E-02    | 1.73E-01 | 4.93E-02 | 4.58E-01 | 9.53E-03 | 2.48E-02   | 1.73E-01 | 4.82E-02    | 1.55E-02 | 2.69E-01 |  |  |
|                                               | HBA002     | 1.78E-02 | 1.48E-02    | 1.62E-02 | 1.35E-02 | 1.35E-02 | 7.36E-03 | 1.48E-02   | 1.73E-01 | 1.62E-02    | 1.68E-02 | 2.69E-02 |  |  |
|                                               | HBA003     | 7.96E-03 | 1.33E-02    | 1.24E-01 | 1.62E-02 | 1.04E-03 | 7.36E-03 | 1.33E-02   | 1.15E-01 | 1.62E-02    | 1.68E-02 | 2.69E-02 |  |  |
|                                               | HBA004     | 1.96E-02 | 1.93E-02    | 2.96E-01 | 4.76E-01 | 2.81E-01 | 2.94E-02 | 2.93E-02   | 2.94E-01 | 2.66E-02    | 1.39E-02 | 2.85E-01 |  |  |
|                                               | HBA005     | 3.56E-02 | 4.93E-02    | 1.47E-01 | 1.23E-01 | 5.59E-01 | 1.99E-01 | 3.00E-01   | 5.09E-01 | 8.78E-01    | 1.43E-01 | 5.58E-01 |  |  |
|                                               | HBA006     | 7.43E-03 | 9.45E-03    | 1.17E-01 | 1.71E-01 | 8.05E-01 | 7.43E-03 | 9.45E-03   | 1.37E-01 | 1.71E-01    | 8.05E-01 | 8.00E-02 |  |  |
|                                               | HBA007     | 1.86E-01 | 7.68E-01    | 1.47E-01 | 1.98E-01 | 9.20E-01 | 1.86E-01 | 7.68E-01   | 1.47E-01 | 1.98E-01    | 9.20E-01 | 8.20E-01 |  |  |
|                                               | HBA008     | 1.69E-01 | 1.69E-01    | 1.69E-01 | 1.69E-01 | 1.69E-01 | 1.69E-01 | 1.69E-01   | 1.69E-01 | 1.69E-01    | 1.69E-01 | 1.69E-01 |  |  |
|                                               | HBA009     | 1.78E-01 | 1.78E-01    | 1.78E-01 | 1.78E-01 | 1.78E-01 | 1.78E-01 | 1.78E-01   | 1.78E-01 | 1.78E-01    | 1.78E-01 | 1.78E-01 |  |  |
|                                               | HBA010     | 2.84E-01 | 9.86E-01    | 2.84E-01 | 1.26E-02 | 9.48E-01 | 1.32E-02 | 2.84E-01   | 9.86E-01 | 2.84E-01    | 1.26E-02 | 9.48E-01 |  |  |
| HbERF-I                                       | HBA011     | 9.27E-01 | 1.22E-01    | 2.24E-01 | 2.96E-01 | 1.79E-01 | 9.27E-01 | 1.22E-01   | 2.24E-01 | 2.96E-01    | 1.79E-01 | 2.24E-01 |  |  |
|                                               | HBA012     | 4.14E-01 | 1.13E-01    | 1.23E-02 | 1.13E-01 | 1.13E-01 | 4.14E-01 | 1.13E-01   | 1.23E-02 | 1.13E-01    | 1.13E-01 | 1.13E-01 |  |  |
|                                               | HBA013     | 1.73E-01 | 1.93E-01    | 2.04E-01 | 1.07E-01 | 2.28E-01 | 1.67E-01 | 1.72E-01   | 1.93E-01 | 2.04E-01    | 1.07E-01 | 1.67E-01 |  |  |
|                                               | HBA014     | 3.71E-01 | 2.76E-01    | 1.49E-01 | 1.49E-01 | 1.76E-01 | 3.71E-01 | 2.76E-01   | 2.84E-01 | 1.47E-01    | 3.86E-01 | 7.75E-01 |  |  |
|                                               | HBA015     | 2.76E-01 | 2.76E-01    | 2.76E-01 | 2.76E-01 | 2.76E-01 | 2.76E-01 | 2.76E-01   | 2.76E-01 | 2.76E-01    | 2.76E-01 | 2.76E-01 |  |  |
|                                               | HBA016     | 2.35E-01 | 1.41E-01    | 1.06E-01 | 1.36E-01 | 7.92E-01 | 5.93E-01 | 2.35E-01   | 1.41E-01 | 2.05E-01    | 1.39E-01 | 7.82E-01 |  |  |
|                                               | HBA017     | 1.93E-01 | 4.23E-01    | 1.03E-01 | 1.03E-01 | 9.03E-01 | 8.56E-01 | 1.93E-01   | 4.23E-01 | 1.03E-01    | 1.03E-01 | 9.03E-01 |  |  |
|                                               | HBA018     | 3.59E-01 | 1.13E-01    | 2.28E-01 | 2.28E-01 | 1.22E-01 | 3.59E-01 | 1.13E-01   | 2.28E-01 | 2.28E-01    | 1.22E-01 | 3.59E-01 |  |  |
|                                               | HBA019     | 3.14E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 3.14E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA020     | 5.67E-02 | 7.44E-02    | 8.36E-02 | 1.62E-02 | 1.27E-02 | 5.36E-02 | 5.67E-02   | 7.44E-02 | 8.36E-02    | 1.62E-02 | 1.27E-02 |  |  |
| HbERF-II                                      | HBA021     | 2.32E-02 | 8.19E-02    | 8.69E-02 | 9.94E-01 | 6.09E-02 | 4.76E-02 | 2.32E-02   | 8.19E-02 | 8.69E-02    | 9.94E-02 | 4.76E-02 |  |  |
|                                               | HBA022     | 4.53E-02 | 4.59E-02    | 4.53E-02 | 6.73E-02 | 4.73E-02 | 9.03E-02 | 4.53E-02   | 4.59E-02 | 4.53E-02    | 6.73E-02 | 9.03E-02 |  |  |
|                                               | HBA023     | 1.37E-01 | 1.37E-01    | 1.37E-01 | 2.36E-01 | 2.36E-01 | 2.36E-01 | 1.37E-01   | 1.37E-01 | 1.37E-01    | 2.36E-01 | 2.36E-01 |  |  |
|                                               | HBA024     | 1.44E-01 | 4.01E-01    | 1.26E-02 | 5.50E-02 | 8.79E-02 | 4.18E-02 | 1.44E-01   | 4.01E-01 | 1.26E-02    | 8.79E-02 | 4.18E-02 |  |  |
|                                               | HBA025     | 3.06E-02 | 1.26E-02    | 1.26E-02 | 1.26E-02 | 1.26E-02 | 3.06E-02 | 1.26E-02   | 1.26E-02 | 1.26E-02    | 1.26E-02 | 1.26E-02 |  |  |
|                                               | HBA026     | 3.03E-01 | 5.33E-01    | 7.54E-01 | 7.54E-01 | 6.01E-01 | 2.03E-01 | 3.03E-01   | 5.33E-01 | 7.54E-01    | 7.54E-01 | 2.03E-01 |  |  |
|                                               | HBA027     | 1.36E-01 | 1.36E-01    | 1.36E-01 | 1.36E-01 | 1.36E-01 | 1.36E-01 | 1.36E-01   | 1.36E-01 | 1.36E-01    | 1.36E-01 | 1.36E-01 |  |  |
|                                               | HBA028     | 8.14E-02 | 1.63E-02    | 1.63E-02 | 3.67E-02 | 1.63E-02 | 9.09E-02 | 8.14E-02   | 1.63E-02 | 1.63E-02    | 3.67E-02 | 9.09E-02 |  |  |
|                                               | HBA029     | 6.87E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 6.87E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA030     | 6.87E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 6.87E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
| HbERF-III                                     | HBA031     | 6.87E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 6.87E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA032     | 3.24E-01 | 1.54E-01    | 1.54E-01 | 1.55E-02 | 1.95E-02 | 1.06E-02 | 3.24E-01   | 1.54E-01 | 1.54E-01    | 1.55E-02 | 1.95E-02 |  |  |
|                                               | HBA033     | 8.24E-01 | 1.72E-02    | 5.76E-01 | 1.49E-01 | 1.28E-01 | 4.34E-01 | 8.24E-01   | 1.72E-02 | 5.76E-01    | 1.28E-01 | 4.34E-01 |  |  |
|                                               | HBA034     | 2.57E-02 | 1.03E-02    | 1.44E-01 | 1.93E-01 | 2.59E-01 | 3.43E-01 | 2.57E-02   | 1.03E-02 | 1.44E-01    | 1.93E-01 | 2.59E-01 |  |  |
|                                               | HBA035     | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 1.06E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA036     | 9.06E-02 | 1.03E-01    | 8.34E-02 | 1.27E-02 | 2.26E-02 | 8.19E-02 | 9.06E-02   | 1.03E-01 | 8.34E-02    | 1.27E-02 | 2.26E-02 |  |  |
|                                               | HBA037     | 1.34E-01 | 1.32E-01    | 1.34E-01 | 1.34E-01 | 1.34E-01 | 1.34E-01 | 1.34E-01   | 1.32E-01 | 1.34E-01    | 1.34E-01 | 1.34E-01 |  |  |
|                                               | HBA038     | 1.34E-01 | 1.34E-01    | 1.34E-01 | 1.34E-01 | 1.34E-01 | 1.34E-01 | 1.34E-01   | 1.34E-01 | 1.34E-01    | 1.34E-01 | 1.34E-01 |  |  |
|                                               | HBA039     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA040     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
| HbERF-IV                                      | HBA041     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA042     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA043     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA044     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA045     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA046     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA047     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA048     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA049     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA050     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
| HbERF-V                                       | HBA051     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA052     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA053     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA054     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA055     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA056     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA057     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA058     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA059     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA060     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
| HbERF-VI                                      | HBA061     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA062     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA063     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA064     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA065     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA066     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA067     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA068     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 |  |  |
|                                               | HBA069     | 9.92E-01 | 1.06E-01    | 1.06E-01 | 1.06E-01 | 1.06E-01 | 9.92E-01 | 1.06E-01   | 1.06E-01 | 1.06E-01    | 1.06E-01 | 1.       |  |  |