

Table S1. Primers of 69 acid-responsive genes that are not affected by cold stress and 9 selected randomly DEGs involved in acid treatment.

Gene	primer sequence (5'-3')
<i>LDB_RS04545</i>	F-GTGTGCCGACCTTGATT R-CATAACTGTTTCTGGGTGAGC
<i>LDB_RS08540</i>	F-TAGCGTAAGCCCAGTTCTG R-TCTTGGTGCTCTTCTCTGC
<i>LDB_RS08995</i>	F-GGAATACGACTTGACCAACCC R-GCGGGAAGAAGGGAATGTA
<i>LDB_RS08180</i>	F-CGACATCTACTATCCCAACGA R-ATGCTTTCCTTGCTCCTCC
<i>LDB_RS06685</i>	F-AACAGGCAAGGCGATTTTC R-TGACTCCAGGCTGATTGAA
<i>LDB_RS04910</i>	F-GCTGGTTGGTGAGGTGTATC R-CCGCCTTATTGTCTTCATCA
<i>LDB_RS00230</i>	F-GAAGAATGGGATGTTGGC R-AGACTGACAGCAAGCGGTA
<i>LDB_RS09405</i>	F-GGACTTGAAAGAAGGGCA R-GCTGACCTGGCTTGATTA
<i>LDB_RS07400</i>	F-GTCTGCCAAACACCAACTT R-GATGAAGAAGCCCAGGAA
<i>LDB_RS02160</i>	F-TGAAGAGCAGGGATACGGA R-CCCAAAGTGCTCAAATGC
<i>LDB_RS01180</i>	F-AGATGAGCACGAATACACCG R-GTTCTTCTTCTTGTCGCTGTCA
<i>LDB_RS02235</i>	F-TGTCAACCTGGAACCTTGC R-TCGGCTTCTCAATGGTCT
<i>LDB_RS02865</i>	F-ATGGCAAGAAGCACTGGA R-CCAAGAAGGCATAGACGCT
<i>LDB_RS02760</i>	F-TTACACCCTTTACCTGACC R-GCTGTTGACCTTCTTGACG
<i>LDB_RS02860</i>	F-TGAGAAAGTCCAATAGCCG R-GAAGGCATCCAGGTTGAA
<i>LDB_RS07105</i>	F-TGCCGACTTGTTTCTTTACC R-TCCAGCGACATTGAGGTT
<i>LDB_RS03130</i>	F-GCTCACCAAAGACCATCATC R-TGTCGCAGTCAGCAGTTCT
<i>LDB_RS04920</i>	F-TTGCCTGGTGAAGTAATCC R-GTCCAAAGTCAAACCGATG
<i>LDB_RS05285</i>	F-CGTTGTCTTAGCGATTCCAGT R-AGCGTCATCATTTACAGGAGA
<i>LDB_RS07675</i>	F-TTGGCTGTTCACTTCTGGC R-TCCATCTTCTTGTTGCGG
<i>LDB_RS08325</i>	F-ACTGGCAAGAAAGACGATG R-AACGGTGGAGACGGATAA
<i>LDB_RS00225</i>	F-ACACCCGACATTTCTTATGC R-ACCTGCCCAACCTAATCTG

<i>LDB_RS02215</i>	F-AGAACAACAACCTGGACGC R-CCCTTAGCCACGATAACCA
<i>LDB_RS02220</i>	F-GGTAGCCAAGGTCTATGTTGAA R-CTGATGAGTAAATGGACAAGCC
<i>LDB_RS02230</i>	F-CAAGATGCTGCCTGATAACC R-ACGCCATTGAACCACTTC
<i>LDB_RS05810</i>	F-ACAAGAAGAAGCAGGAAAGC R-CGGAAGTTGGCGATAAAC
<i>LDB_RS01340</i>	F-TAATCGCCTTTGCCCTCT R-CGGCGAAGATTGCTAAATAG
<i>LDB_RS07405</i>	F-ATGAAATCCCACCTTACGAC R-TCAAAGTCCCGTTATCTGG
<i>LDB_RS00495</i>	F-TTTCGGAAGTCTTGAGCG R-CCCGATAATGTAGGCAACC
<i>LDB_RS05660</i>	F-AGGAGGCAGCATCAAAGA R-GTTGGCAAATGGTGTGTC
<i>LDB_RS01085</i>	F-CGGTTCAAAGGTTGCTCT R-TGCGTAGTCATCATCTTCGT
<i>LDB_RS02620</i>	F-GTAACCATTCCGCTTCCAT R-ACCTTCTCCTCTTCAACCG
<i>LDB_RS10750</i>	F-TGAAGATAATGGTTCCCGC R-TGGTAGGCAAGAAGTTCGG
<i>LDB_RS00810</i>	F-CTCATACAACGACACTGGCT R-CGTAAGCAACCGAGATTTG
<i>LDB_RS08785</i>	F-CTAACGCCTTTGACTGCTC R-TCTTGCCTCGGTAAACTTG
<i>LDB_RS06340</i>	F-GCTTGGTCTGCTCAGTTCAC R-CTTCCATTTCCGCAATAACC
<i>LDB_RS05555</i>	F-ATTGAACTGACCGAGGCTG R-CGATTGAAGAAGAGACGGAA
<i>LDB_RS07770</i>	F-TTATCCGCCTAAGACCAGC R-CAAGTCAATCCCGCAAAG
<i>LDB_RS02110</i>	F-CCCACCCACAATACTCAGA R-GCAAGAAGGCGTATGAAC
<i>LDB_RS06895</i>	F-TGGTCCTGTTACGATTCC R-TCCATCTTGCCATTGACG
<i>LDB_RS08505</i>	F-GTGGCGTTTACTGGTTCAA R-CCGTCTTCATCTTCTTACC
<i>LDB_RS02225</i>	F-TGGTGGTCTTTGAATCAGC R-TGTAGGTCATCCCGTTTGA
<i>LDB_RS04520</i>	F-GGCAGGTATGGAAAGACAA R-CCGATAAACTGAATGACCG
<i>LDB_RS05665</i>	F-GGCTGGTCGTCACTAAAGATG R-CGTAATCAGGGTTGTTCGG
<i>LDB_RS08320</i>	F-CCCTAACCCAGCATTCTCTTT R-ATAATGGACCGCTTGACG
<i>LDB_RS06880</i>	F-TATCCTGCCTGCCGTGTTT R-CGAATCAAGTAGTAGACGCCA

<i>LDB_RS00370</i>	F-GCCGCTAACAAGGAATACG R-CGCAAAGTCAAAGACCTCA
<i>LDB_RS02765</i>	F-AACTGAACCCAATGCTGAC R-TCGTCCATCAAGTCCTCAT
<i>LDB_RS04625</i>	F-GTCACCGTCAAGAATCTGC R-TCCAAGGTCTGTAGTTCCTGT
<i>LDB_RS10060</i>	F-CCTTATGACCGAAACTTCAGC R-CCATCAGCCAAGATTACGG
<i>LDB_RS08560</i>	F-CATCATCATCCAGCAAGTCT R-TAGTGGCGGTTGAAGAGTC
<i>LDB_RS06890</i>	F-CAACGGGACAGAAATCTTG R-TAGTCGGAGTGCTTGGTTC
<i>LDB_RS08265</i>	F-CTAATCATTGCTTCCGTTGC R-GAACCAAGTATGTCAAAGGCTG
<i>LDB_RS02250</i>	F-TGTGGGCGAGACAGTTGTA R-CTCGGTCATTGAAATCTTGC
<i>LDB_RS02145</i>	F-CAGGACCACTTTGCCTTT R-TAACCTTGTCGCTTTCCG
<i>LDB_RS02340</i>	F-CTATCTCAACTCTCTCCGTGC R-ACTACCCAGACGATGACCA
<i>LDB_RS05955</i>	F-TTCCATTCCACAGTCAGATG R-GATTTGGCTCAACTTCGTG
<i>LDB_RS07140</i>	F-TTCTGTTGCTGTTCAAGGAG R-CGGCTGTTTCTTCTTTGG
<i>LDB_RS06900</i>	F-TACCTGGACAAGCACAACG R-GGTGTAGTGAAGAGGCTGT
<i>LDB_RS10075</i>	F-CAATGGGTGAACGGAAAG R-TTGAGTAGACAGTTGCCGC
<i>LDB_RS00580</i>	F-TCTGGCTGAGTAAAGTGGCT R-ACCTCAAAGCGACAACA
<i>LDB_RS08185</i>	F-TCAACCCTAAGCAAGTTCCG R-AGGTGATAAAGTAGAAGTCCGC
<i>LDB_RS00585</i>	F-CCGTAAGCCGTTCTTGAT R-TGGCGTAATCAGTCCTATCA
<i>LDB_RS05380</i>	F-ATCGTGCCTACTCCAGTCTG R-GGTCGTTTCAGCATAACAGC
<i>LDB_RS00250</i>	F-TGAAGACAAGCGGCAGAA R-AGCAGGAAGAGGGTGGAAA
<i>LDB_RS03405</i>	F-CTAACGAACGCAATGCTG R-GCTAAACGACTCTTGTACAG
<i>LDB_RS08695</i>	F-TGGCTCCTAATGAAGTTGC R-GAAGTATTGCTTGGGATTGG
<i>LDB_RS00270</i>	F-GTTCCGGCTTTACTCCACTTT R-CGTATTGCCAGTCGTTGT
<i>LDB_RS01245</i>	F-AGTCCTTTCTCAATCATCG R-ACGCTCAAACCGCTAAAC
<i>LDB_RS01640</i>	F-ATGAATCACGCAAGCACG R-CCAACCTGGGAAACGATAACTC

<i>LDB_RS03500</i>	F-TGGAACGAAGCAGTCAAGG R-TGGGTGAATGTGGATAGCA
<i>LDB_RS07710</i>	F-CCAGGTCATCATAACGGTCA R-CAGAAACGCTATCCGAAACA
<i>LDB_RS07165</i>	F-CAGTATTCGTTGGTCCATCAG R-CGACTTG TTCCTTGGTAGCA
<i>LDB_RS05610</i>	F-AAGACAGTTTACGGTGACACG R-CTCGTTGATGGACTTCGGA
<i>LDB_RS08890</i>	F-GAATCAGCGACGACACCC R-CAGTTGGCAGGCTTGGAG
<i>LDB_RS09670</i>	F-CGATGATGAGCGAAGAAGTCTG R-TGACAGAGGTTGGTTGGATTC
<i>LDB_RS00400</i>	F-TGCTGACGGTGTGTTGTTGTTT R-TTACGCAGGCTCATCTTAGTGA
<i>LDB_RS03675</i>	F-ACGGTGCTGTTGGTTTGACTA R-CCTTCTTTGAGCCGATGACA