Table 1S. BoBPC genes expression data from wild to mutant type of *B. oleracea*

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| #ID | WTrep1 | WTrep2 | WTrep3 | MEAN | nwglrep1 | nwglrep2 | nwglrep3 | MEAN | P VALUE | Log2 folds | OP/DOWN Regulation |
| BoBPC1 | 0.352241 | 0.213611 | 0.217762 | 0.261204667 | 0.046929 | 0.208236 | 0 | 0.085055 | 0.186514061 | -0.487281083 | 0.325625882 |
| BoBPC2 | 3.167249 | 4.607524 | 3.139493 | 3.638088667 | 2.253278 | 6.939718 | 2.277297 | 3.823431 | 0.878819401 | 0.021579978 | 1.050944974 |
| BoBPC3 | 2.134926 | 2.666149 | 2.149396 | 2.316823667 | 2.349427 | 4.626733 | 0.891482 | 2.622547333 | 0.77363629 | 0.053830354 | 1.131958108 |
| BoBPC4 | 0 | 0.01101 | 0.012492 | 0.007834 | 0 | 0 | 0.027868 | 0.009289333 | 0.86670951 | 0.07400098 | 1.185771424 |
| BoBPC5 | 0.361936 | 0.616363 | 0.141449 | 0.373249333 | 0.243377 | 0.378705 | 0.189132 | 0.270404667 | 0.339849102 | -0.139984858 | 0.724461218 |
| BoBPC6 | 6.137639 | 6.414638 | 5.270349 | 5.940875333 | 7.572608 | 9.205157 | 4.952387 | 7.243384 | 0.284696875 | 0.08609107 | 1.219245245 |
| BoBPC7 | 12.538385 | 16.460437 | 10.008758 | 13.00252667 | 10.170075 | 14.100845 | 9.084633 | 11.11851767 | 0.059193234 | -0.067980863 | 0.855104393 |
| BoBPC8 | 3.635797 | 2.655889 | 2.108066 | 2.799917333 | 2.469761 | 2.532317 | 1.962921 | 2.321666333 | 0.298904188 | -0.081345405 | 0.829191028 |
| BoBPC9 | 4.783033 | 7.540372 | 5.915658 | 6.079687667 | 4.91882 | 5.210195 | 4.872394 | 5.000469667 | 0.268869181 | -0.084870472 | 0.822487921 |
| BoBPC10 | 2.219229 | 1.700547 | 0.816411 | 1.578729 | 0.764811 | 0.826998 | 1.740849 | 1.110886 | 0.580597064 | -0.152638093 | 0.703658449 |
| BoBPC11 | 2.076211 | 1.77125 | 0.757721 | 1.535060667 | 1.726259 | 0.955068 | 1.502567 | 1.394631333 | 0.79014788 | -0.041666125 | 0.908518708 |

Table 2S. BoBPC gene expression data in seven tissues of *B. oleracea*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gene IDs | Bud-R1 | Bud-R2 | Bud-R3 | Callus-R1 | Callus-R2 | Callus-R3 | Flower-R1 | Flower-R2 | Flower-R3 | Leaf-R1 | Leaf-R2 | Leaf-R3 | Root-R1 | Root-R2 | Root-R3 | Silique-R1 | Silique-R2 | Silique-R3 | Stem-R1 | Stem-R2 | Stem-R3 | P value |
| BoBPC1 | 0.7023 | 0.205699 | 1.1989 | 1.93094 | 1.06739 | 2.79448 | 0.520303 | 0.0954774 | 0.945129 | 0.782336 | 0.260779 | 1.30389 | 0.0876289 | 0 | 0.262887 | 0.779166 | 0.259722 | 1.29861 | 0.175785 | 0 | 0.424383 | 0.0005 |
| BoBPC2 | 19.5598 | 16.9103 | 22.2093 | 19.834 | 17.036 | 22.6319 | 10.2811 | 8.37194 | 12.1902 | 30.2068 | 26.9305 | 33.4832 | 43.1689 | 39.2363 | 47.1014 | 16.6349 | 14.2085 | 19.0614 | 11.4086 | 9.38389 | 13.4333 | 0.002 |
| BoBPC3 | 12.2319 | 10.5356 | 13.9281 | 9.44251 | 7.87957 | 11.0054 | 5.2862 | 4.17791 | 6.39448 | 17.2361 | 15.2324 | 19.2398 | 12.9729 | 11.2276 | 14.7182 | 7.07528 | 5.79415 | 8.35641 | 6.88866 | 5.61495 | 8.16237 | 0.04 |
| BoBPC4 | 11.4781 | 9.87868 | 13.0775 | 11.4591 | 9.78314 | 13.135 | 5.88925 | 4.75058 | 7.02792 | 22.5103 | 20.2815 | 24.7392 | 19.244 | 17.1748 | 21.3131 | 8.95665 | 7.55357 | 10.3597 | 4.85336 | 3.81269 | 5.89402 | 0.004 |
| BoBPC5 | 3.8199 | 2.5466 | 5.0932 | 3.85096 | 2.51023 | 5.19169 | 1.36259 | 0.606761 | 2.11842 | 10.8219 | 8.6893 | 12.9546 | 1.58875 | 0.768323 | 2.40918 | 6.69706 | 5.02279 | 8.37132 | 2.54965 | 1.50876 | 3.59054 | 0.0001 |
| BoBPC6 | 30.7215 | 27.7515 | 33.6914 | 16.7355 | 14.4367 | 19.0343 | 38.7845 | 35.4679 | 42.1011 | 19.2613 | 16.9212 | 21.6014 | 9.17114 | 7.5499 | 10.7924 | 25.9788 | 23.2666 | 28.691 | 24.0029 | 21.3762 | 26.6297 | 0.0002 |
| BoBPC7 | 45.7288 | 41.8778 | 49.5799 | 22.0249 | 19.222 | 24.8277 | 39.8853 | 36.3107 | 43.4599 | 50.4986 | 46.4716 | 54.5256 | 18.6146 | 16.1598 | 21.0694 | 41.8983 | 38.2377 | 45.559 | 22.5671 | 19.8601 | 25.274 | 0.004 |
| BoBPC8 | 7.96371 | 6.31211 | 9.61531 | 4.52042 | 3.21549 | 5.82535 | 9.22001 | 7.45378 | 10.9862 | 10.7685 | 8.85738 | 12.6796 | 2.73525 | 1.7682 | 3.70231 | 8.36031 | 6.67982 | 10.0408 | 4.54389 | 3.29559 | 5.7922 | 0.0007 |
| BoBPC9 | 9.57225 | 7.75513 | 11.3894 | 11.4758 | 9.38926 | 13.5623 | 11.6704 | 9.67622 | 13.6645 | 24.4216 | 21.5335 | 27.3098 | 4.99268 | 3.68154 | 6.30383 | 14.2024 | 12.0044 | 16.4004 | 10.4471 | 8.54763 | 12.3466 | 0.006 |
| BoBPC10 | 15.6017 | 13.2695 | 17.934 | 9.68157 | 7.75487 | 11.6083 | 6.88782 | 5.34766 | 8.42799 | 28.567 | 25.4267 | 31.7074 | 4.17615 | 2.9706 | 5.38169 | 19.426 | 16.8416 | 22.0103 | 10.2972 | 8.40137 | 12.1931 | 0.006 |
| BoBPC11 | 6.95001 | 6.26419 | 7.63583 | 4.56851 | 4.07562 | 5.0614 | 4.5374 | 4.07485 | 4.99994 | 10.6391 | 9.61952 | 11.6588 | 4.38575 | 3.7481 | 5.0234 | 6.61759 | 6.05619 | 7.17899 | 6.15852 | 5.38768 | 6.92937 | 0.006 |