**Supp 1.** The statistical descriptions, true positive values, false positive values, true negative values, and false negative values of *ZW10* transcriptional expression levels.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | **Experimental** | | | **Control** | | | **TP** | **FP** | **FN** | **TN** |
| **N** | **Mean** | **SD** | **N** | **Mean** | **SD** |
| E\_MTAB\_4171 | 15 | 10.24 | 0.43 | 15 | 9.65 | 0.36 | 11 | 2 | 4 | 13 |
| E\_MTAB\_8887 | 23 | 3.96 | 1.10 | 17 | 3.69 | 0.71 | 6 | 1 | 17 | 16 |
| GPL11154 | 163 | 2.15 | 0.44 | 140 | 2.42 | 0.63 | 157 | 132 | 6 | 8 |
| GPL14951 | 93 | 9.26 | 0.83 | 18 | 8.36 | 0.81 | 67 | 3 | 26 | 15 |
| GPL16043 | 25 | 1.42 | 0.74 | 25 | 1.18 | 0.67 | 10 | 3 | 15 | 22 |
| GPL16791 | 79 | 5.20 | 0.52 | 78 | 4.92 | 0.48 | 51 | 28 | 28 | 50 |
| GPL21047 | 10 | 3.31 | 0.10 | 10 | 3.22 | 0.06 | 8 | 1 | 2 | 9 |
| GPL5175 | 48 | 3.03 | 0.08 | 48 | 2.96 | 0.06 | 25 | 1 | 23 | 47 |
| GPL570 | 844 | 4.45 | 0.24 | 528 | 4.41 | 0.24 | 145 | 45 | 699 | 483 |
| GPL571 | 96 | 2.83 | 0.12 | 131 | 2.81 | 0.11 | 16 | 8 | 80 | 123 |
| GPL6244 | 66 | 3.44 | 0.12 | 75 | 3.41 | 0.09 | 27 | 9 | 39 | 66 |
| GPL6480 | 83 | 3.27 | 0.06 | 82 | 3.25 | 0.05 | 41 | 21 | 42 | 61 |
| GPL6947 | 104 | 3.33 | 0.08 | 97 | 3.27 | 0.06 | 73 | 35 | 31 | 62 |
| GPL9052 | 60 | 2.28 | 0.69 | 60 | 1.98 | 0.54 | 35 | 17 | 25 | 43 |
| GSE114783\_GPL15491 | 10 | 7.82 | 1.38 | 26 | 8.48 | 1.27 | 1 | 2 | 9 | 24 |
| GSE115018\_GPL20115 | 12 | -0.48 | 0.47 | 12 | -0.82 | 0.20 | 11 | 4 | 1 | 8 |
| GSE124535\_GPL20795 | 35 | 2.49 | 0.54 | 35 | 1.85 | 0.31 | 27 | 3 | 8 | 32 |
| GSE125469\_GPL20301 | 3 | 5.05 | 0.74 | 3 | 4.60 | 0.24 | 3 | 2 | 0 | 1 |
| GSE128274\_GPL18573 | 4 | 5.31 | 0.18 | 4 | 4.55 | 0.12 | 4 | 0 | 0 | 4 |
| GSE14520\_GPL3921 | 225 | 2.84 | 0.10 | 220 | 2.77 | 0.07 | 123 | 31 | 102 | 189 |
| GSE166163\_GPL23126 | 3 | 4.28 | 0.18 | 3 | 4.46 | 0.44 | 3 | 2 | 0 | 1 |
| GSE20140\_GPL18461 | 35 | 8.98 | 0.31 | 34 | 8.84 | 0.17 | 25 | 10 | 10 | 24 |
| GSE22058\_GPL6793 | 100 | 8.79 | 0.41 | 97 | 8.61 | 0.31 | 54 | 21 | 46 | 76 |
| GSE22405\_GPL10553 | 24 | 2.85 | 0.04 | 24 | 2.84 | 0.04 | 19 | 13 | 5 | 11 |
| GSE25097\_GPL10687 | 268 | 2.53 | 0.06 | 289 | 2.50 | 0.05 | 144 | 66 | 124 | 223 |
| GSE33294\_GPL10999 | 3 | 3.65 | 0.24 | 3 | 2.07 | 0.10 | 3 | 0 | 0 | 3 |
| GSE46408\_GPL4133 | 6 | 9.45 | 0.67 | 6 | 8.49 | 0.40 | 5 | 0 | 1 | 6 |
| GSE46444\_GPL13369 | 88 | 7.26 | 1.57 | 48 | 7.10 | 1.62 | 72 | 32 | 16 | 16 |
| GSE50579\_GPL14550 | 67 | 3.22 | 0.11 | 10 | 3.07 | 0.19 | 47 | 1 | 20 | 9 |
| GSE55048\_GPL9115 | 4 | 2.49 | 0.54 | 4 | 1.52 | 0.17 | 4 | 0 | 0 | 4 |
| GSE56545\_GPL15433 | 21 | 3.13 | 0.10 | 21 | 3.11 | 0.06 | 14 | 4 | 7 | 17 |
| GSE57555\_GPL16699 | 5 | -0.17 | 0.02 | 5 | -0.14 | 0.03 | 5 | 5 | 0 | 0 |
| GSE59259\_GPL18451 | 8 | 9.49 | 0.58 | 8 | 9.83 | 0.27 | 2 | 1 | 6 | 7 |
| GSE60502\_GPL96 | 18 | 9.57 | 0.20 | 18 | 9.62 | 0.18 | 3 | 1 | 15 | 17 |
| GSE63898\_GPL13667 | 228 | 7.20 | 0.64 | 168 | 6.93 | 0.45 | 91 | 13 | 137 | 155 |
| GSE67764\_GPL17077 | 3 | 0.47 | 0.68 | 6 | 0.90 | 0.29 | 3 | 6 | 0 | 0 |
| GSE76311\_GPL17586 | 62 | 2.83 | 0.07 | 59 | 2.77 | 0.03 | 40 | 4 | 22 | 55 |
| TCGA\_GTEx\_liver | 371 | 3.70 | 0.38 | 276 | 3.58 | 0.37 | 189 | 81 | 182 | 195 |