

**Table-S4: Genes with description containing term "stress" in the Serum vs. Serum with Butanol**

| Gene ID                  | 20 min      | 45 min       | 120 min      | Common name   |
|--------------------------|-------------|--------------|--------------|---------------|
| <b>Upregulated Genes</b> |             |              |              |               |
| <b>C1_03870C_A</b>       | <b>10.1</b> |              |              |               |
| <b>C1_08070W_A</b>       |             | <b>9.20</b>  | <b>8.87</b>  | <b>CDR4</b>   |
| <b>C4_04100C_A</b>       | <b>8.6</b>  | <b>21.24</b> |              | <b>ECM1</b>   |
| <b>C6_01180C_A</b>       | <b>8.16</b> | <b>9.88</b>  | <b>11.31</b> | <b>EBP1</b>   |
| <b>C2_04080W_A</b>       | <b>7.18</b> | <b>8.59</b>  |              |               |
| <b>C1_07990C_A</b>       |             | <b>7.10</b>  | <b>5.04</b>  |               |
| <b>CR_08340W_A</b>       | <b>6.75</b> | <b>4.93</b>  |              | <b>CYS3</b>   |
| <b>C4_06710W_A</b>       | <b>6.62</b> | <b>5.54</b>  | <b>2.97</b>  |               |
| <b>C1_04330W_A</b>       | <b>2.38</b> | <b>6.15</b>  |              | <b>RPN4</b>   |
| <b>C1_06810W_A</b>       |             | <b>5.77</b>  | <b>11.65</b> | <b>CAT1</b>   |
| <b>C2_10240W_A</b>       | <b>5.5</b>  | <b>7.70</b>  | <b>3.89</b>  | <b>GPD1</b>   |
| <b>C2_06170C_A</b>       | <b>4.91</b> | <b>2.25</b>  |              | <b>ECM17</b>  |
| <b>CR_03710C_A</b>       |             | <b>4.67</b>  | <b>2.38</b>  |               |
| <b>C7_01670W_A</b>       |             | <b>4.30</b>  |              |               |
| <b>C1_05840W_A</b>       |             | <b>4.13</b>  | <b>2.06</b>  | <b>PRN1</b>   |
| <b>CR_08890C_A</b>       | <b>4.11</b> | <b>4.81</b>  | <b>8.73</b>  | <b>ASR2</b>   |
| <b>C3_01300C_A</b>       | <b>3.67</b> |              |              | <b>NCE103</b> |
| <b>C3_07100C_A</b>       |             | <b>3.41</b>  | <b>2.1</b>   |               |
| <b>C6_00290W_A</b>       |             | <b>3.67</b>  | <b>4.08</b>  |               |
| <b>C3_00320W_A</b>       | <b>3.28</b> |              | <b>3.56</b>  | <b>RHR2</b>   |
| <b>C6_01870C_A</b>       |             | <b>3.90</b>  |              |               |
| <b>C1_11700C_A</b>       |             | <b>3.84</b>  | <b>2.54</b>  | <b>MRF1</b>   |
| <b>C1_09170W_A</b>       | <b>3.25</b> | <b>3.04</b>  |              | <b>CTA8</b>   |
| <b>C4_00960W_A</b>       | <b>3.16</b> |              |              | <b>PTC8</b>   |
| <b>C1_04740W_A</b>       |             | <b>3.12</b>  | <b>2.84</b>  | <b>LPG20</b>  |
| <b>CR_09670C_A</b>       |             | <b>3.07</b>  | <b>2.58</b>  |               |

|             |      |      |       |       |
|-------------|------|------|-------|-------|
| C2_07070W_A |      | 3.23 | 2.56  |       |
| C4_06780C_A |      | 3.03 | 2.19  | OYE32 |
| C7_04090C_A | 3.03 | 6.42 | 3.42  |       |
| C2_02880C_A |      | 2.38 | 2.37  | EBP7  |
| C1_00840C_A | 2.98 |      |       | NRM1  |
| C2_07130C_A | 2.94 | 4.31 | 3.34  | RCK2  |
| CR_01550C_A | 2.85 |      |       |       |
| C1_00500C_A |      | 2.73 |       | GLO1  |
| C1_09010W_A | 2.76 |      |       | NAR1  |
| C6_03750C_A |      | 2.35 |       | SBA1  |
| CR_10270C_A |      | 2.71 |       | AHA1  |
| C1_11910W_A | 2.71 | 3.66 |       |       |
| C7_04230W_A | 2.45 | 8.44 | 11.72 | NRG1  |
| C1_04330W_A | 2.38 |      |       | RPN4  |
| C3_05930W_A | 2.35 | 3.78 | 2.02  | CTA4  |
| C7_01940C_A |      | 2.35 |       |       |
| C6_01160W_A |      | 2.32 |       | RCN1  |
| CR_06490C_A | 2.18 |      |       | HSP60 |
| C1_10220C_A |      | 2.29 |       | TPK1  |
| C1_13960W_A | 2.12 |      |       | YBP1  |
| C3_06310C_A | 2.08 |      |       | ISW2  |
| C3_06620W_A | 2.05 |      |       | FUN31 |
| C6_01070C_A | 2.05 |      |       | CIP1  |
| C1_01520C_A |      | 2.21 | 2.81  | SOD2  |
| C3_06270C_A | 2.04 |      |       |       |
| CR_08370W_A | 2.04 | 2.18 |       | GSH2  |
| C1_03300C_A |      | 2.14 |       | MAS1  |
| C3_06340W_A |      | 2.13 |       | HNT2  |
| CR_00980C_A |      | 2.13 |       |       |
| C1_01130W_A |      | 2.12 |       |       |

|             |       |       |      |        |
|-------------|-------|-------|------|--------|
| C6_02480W_A |       | 2.12  |      |        |
| C1_05540C_A |       | 2.10  |      |        |
| C7_02330W_A |       | 2.09  |      | YCF1   |
| CR_02510W_A |       | 2.09  |      |        |
| C1_11660W_A |       | 2.06  |      | GAD1   |
| C2_09880C_A |       | 2.06  |      |        |
| CR_08250C_A |       | 2.06  |      | HSP104 |
| C5_01520C_A |       | 2.02  | 2.14 | GLR1   |
| C5_02080C_A |       |       | 5.54 | HSP12  |
| C7_00110W_A |       |       | 3.82 | SOD3   |
| C2_07630C_A |       |       | 2.66 |        |
| C4_02410C_A |       |       | 2.48 | AHP1   |
| CR_03470W_A |       |       | 2.44 |        |
| CR_03280W_A |       |       | 2.26 | IFR2   |
| C1_04320W_A |       |       | 2.22 | GPM2   |
| C1_06780W_A |       |       | 2.03 | NPR1   |
| C1_09690W_A | -3.15 |       | 2.63 | MLS1   |
| C2_06470W_A | -2.29 | 3.83  | 2.63 | RTA2   |
| C3_01200W_A | 6.11  |       |      | UTP20  |
| C1_04040C_A | 5.58  | 13.39 | 2.48 |        |
| CR_05520W_A | 5.44  | 11.85 |      | NOC2   |
| C1_10970W_A | 5.42  | 10.13 | 2.58 |        |
| C4_05010W_A | 5.4   | 21.10 | 2.5  |        |
| CR_05630W_A | 5.39  | 9.75  | 2.27 | DBP8   |
| CR_09800C_A | 5.34  | 6.20  | 2.12 |        |
| C1_03230C_A | 5.25  | 8.97  |      | ARX1   |
| C2_05090W_A | 5.03  | 15.30 | 2.3  | MAK5   |
| C1_04390C_A | 4.95  | 9.46  |      | NOP4   |
| C7_04190C_A | 4.81  | 11.62 | 2.62 | UTP18  |
| CR_03650W_A | 4.59  | 7.24  | 2.15 | SGD1   |

|                             |         |       |       |        |
|-----------------------------|---------|-------|-------|--------|
| C5_02550C_A                 | 4.36    | 8.79  |       | UTP13  |
| CR_02530W_A                 |         | 4.35  |       | DBP2   |
| C4_00540C_A                 | 4.32    | 3.59  |       | NMD5   |
| C4_02790C_A                 | 4.05    |       | 2.54  | SAS10  |
| C2_07450C_A                 | 3.99    | 5.16  | 2.76  | RCL1   |
| C2_08000C_A                 | 3.92    | 5.66  | 2.44  | KRE30  |
| CR_06720W_A                 | 3.88    | 8.75  | 2.43  | NMD3   |
| CR_10550W_A                 | 3.88    | 8.31  | 2.37  | DRS1   |
| C1_08870C_A                 | 3.87    | 4.66  | 2.37  | JIP5   |
| C4_01450W_A                 | 3.84    | 5.60  |       | PWP1   |
| C4_02850W_A                 | 3.22    | 5.91  |       |        |
| C2_00070C_A                 | 3.17    | 6.78  |       | MPP10  |
| C1_00640C_A                 | 3.06    |       |       | RPO41  |
| C2_06390C_A                 |         | 3.31  |       | IMH3   |
| C2_10740C_A                 | 3.06    | 5.75  |       |        |
| CR_00800C_A                 | 2.97    | 3.66  |       | PWP2   |
| CR_00680W_A                 | 2.85    | 6.33  | 2.07  | BUD22  |
| C1_00990C_A                 | 2.81    | 3.20  |       | NMA111 |
| C1_07910C_A                 | 2.24    |       |       | MRPL3  |
| C4_07130W_A                 | 2.07    |       |       |        |
| C2_07890W_A                 | 2.04    | 2.24  |       | PRS5   |
| <b>Down regulated genes</b> |         |       |       |        |
| C6_02100W_A                 | -428.43 |       | -7.66 |        |
| C6_02210W_A                 | -11.91  | -4.35 | -4.81 |        |
| C2_09220W_A                 | -5.71   |       | -2.3  | DDR48  |
| C1_11270W_A                 | -4.62   |       |       |        |
| C7_00350C_A                 | -3.66   |       |       |        |
| C5_04980W_A                 | -3.62   |       |       |        |
| C1_11850W_A                 | -3.09   |       |       |        |
| CR_00780C_A                 | -2.52   | -2.18 |       | GSY1   |

|                    |              |               |               |       |
|--------------------|--------------|---------------|---------------|-------|
| <b>C4_03430W_A</b> | <b>-2.44</b> |               |               | MOH1  |
| <b>C7_03440W_A</b> |              | <b>-3.37</b>  | <b>-2.49</b>  | SNG4  |
| <b>C2_01780W_A</b> |              | <b>-3.14</b>  | <b>-2.69</b>  | MSB2  |
| <b>C2_03790C_A</b> |              | <b>-2.70</b>  | <b>-2.31</b>  | ASR3  |
| <b>C2_02860W_A</b> |              | <b>-2.43</b>  |               | SUR2  |
| <b>C1_10510W_A</b> |              | <b>-2.01</b>  |               |       |
| <b>C2_04010C_A</b> | <b>-7.44</b> |               |               | HSP21 |
| <b>C2_00680C_A</b> |              | <b>-51.19</b> | <b>-52.42</b> | SOD5  |
|                    |              |               |               |       |