**Table S1.** Primers used in this study

|  |  |
| --- | --- |
| Name | Sequence (5’-3’) |
| TRR1-F | TATGATGGCGAACGGTATTGCTG |
| TRR1-R | ACAGGTTCTGCGTCTTCGTTAAATTC |
| TRX2-F | ATGGTCACTCAATTAAAATCCGCTTC |
| TRX2-R | TTGTAGAAGATTAGGGTAGGCATGGAAG |
| GSH1-F | TCCATATTTGAATTACGTGGGTAGTTACG |
| GSH1-R | AAGCGGCATTTTTATGATTCCACG |
| SOD1-F | TGTTAAAGGGTGATGCCGGTGTCTC |
| SOD1-R | TTCGTCAGTTGGAGCACCATGTGTC |
| CTT1-F | TTCCTCAGAGACGCTATTAAGTTTCCC |
| CTT1-R | TCTTTGTTGACCATGATGAAGGAATGAC |
| GPX2-F | AATGCAAGGACAAGAAAGGCGAATC |
| GPX2-R | TTCCTGCTTCCCGAACTGATTACATG |
| PGK1-RT-F | TACGTTGTCTTGGCTTCTCACTTGG |
| PGK1-RT-R | TTGGAAGCCTTGACCTTTTGACC |

**Supplementary Table 2** List of 48 genes whose deletion mutants were also sensitive to zinc stress response reported previously

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene** | **Systematic Name** | **Chemical** | **Reference** |
| ATS1 | YAL020C | 1 uM zinc dichloride | ([North *et al.* 2012](#_ENREF_4)) |
| CCR4 | YAL021C | 4 mM zinc dichloride | ([Pagani *et al.* 2007](#_ENREF_5)) |
| SHP1 | YBL058W | 4 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| VPS15 | YBR097W | 4 mM zinc dichloride | ([Sambade *et al.* 2005](#_ENREF_7)) |
| VPS15 | YBR097W | 2 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| VMA2 | YBR127C | 2 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| VMA2 | YBR127C | zinc dichloride | ([Hoepfner *et al.* 2014](#_ENREF_2)) |
| VMA2 | YBR127C | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| CCZ1 | YBR131W | 5 mM zinc dichloride | ([Kucharczyk *et al.* 1999](#_ENREF_3)) |
| CCZ1 | YBR131W | 5 mM zinc dichloride | ([Kucharczyk et al. 1999](#_ENREF_3)) |
| CCZ1 | YBR131W | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| CCZ1 | YBR131W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| ATG22 | YCL038C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| PAT1 | YCR077C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| SRB8 | YCR081W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| CSM1 | YCR086W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| SRF1 | YDL133W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| DHH1 | YDL160C | 6 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| REG1 | YDR028C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| YDR203W | YDR203W | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| PMP3 | YDR276C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| NHX1 | YDR456W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| SLX8 | YER116C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| DEG1 | YFL001W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| MDJ1 | YFL016C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| AFT1 | YGL071W | 4 mM zinc dichloride | ([Sambade et al. 2005](#_ENREF_7)) |
| AFT1 | YGL071W | 2 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| VPS45 | YGL095C | 4 mM zinc dichloride | ([Banuelos *et al.* 2010](#_ENREF_1)) |
| VPS45 | YGL095C | 4 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| MON1 | YGL124C | 4 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| MON1 | YGL124C | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| MON1 | YGL124C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| VAM7 | YGL212W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| VMA21 | YGR105W | 2 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| VMA21 | YGR105W | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| NEM1 | YHR004C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| VMA16 | YHR026W | 2 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| VMA16 | YHR026W | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| VTC4 | YJL012C | 6 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| APS3 | YJL024C | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| APS3 | YJL024C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| LSM1 | YJL124C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| VPS35 | YJL154C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| RCY1 | YJL204C | 4 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| RCY1 | YJL204C | zinc dichloride | ([Rieger *et al.* 1999](#_ENREF_6)) |
| RCY1 | YJL204C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| NUC1 | YJL208C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| YJL211C | YJL211C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| VPH2 | YKL119C | 2 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| VPH2 | YKL119C | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| VPS51 | YKR020W | 4 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| VPS51 | YKR020W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| SWI6 | YLR182W | 4 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| YPT6 | YLR262C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| SEC22 | YLR268W | 4 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| TUS1 | YLR425W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| VMA6 | YLR447C | 2 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| ZRC1 | YMR243C | 6 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| ZRC1 | YMR243C | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| ZRC1 | YMR243C | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| ARP5 | YNL059C | 6 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| RPL16B | YNL069C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| BNI1 | YNL271C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| LEM3 | YNL323W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| VPH1 | YOR270C | 4 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| VPH1 | YOR270C | zinc dichloride | ([Hoepfner et al. 2014](#_ENREF_2)) |
| VPH1 | YOR270C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| VPS16 | YPL045W | 4 mM zinc dichloride | ([Sambade et al. 2005](#_ENREF_7)) |
| VPS16 | YPL045W | 2 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| HFI1 | YPL254W | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| YPL261C | YPL261C | 1 uM zinc dichloride | ([North et al. 2012](#_ENREF_4)) |
| PLC1 | YPL268W | 6 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| YCL007C | YCL007C | 2 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |
| VMA5 | YKL080W | 2 mM zinc dichloride | ([Pagani et al. 2007](#_ENREF_5)) |

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