

Supplementary Information

Table S1. Changes in mRNA levels observed for genes encoding proteins included in Table 1. Data are from accession GEO (GSE41094): * + activation; – repression.

| Untreated Mutant $\Delta skyI$ versus Untreated Wild Type | | | |
|---|------------------------------------|--|--------|
| Gene | W303-1A \log_2 Mean ± SD | $\Delta skyI$ \log_2 Mean ± SD | FOLD * |
| <i>YLR179C</i> | 7.78 ± 0.02 | 7.79 ± 0.03 | 1.00 |
| <i>ACS2; YLR153C</i> | 9.24 ± 0.30 | 9.61 ± 0.07 | 1.45 |
| <i>SHM2; YLR058C</i> | 9.62 ± 0.11 | 9.16 ± 0.08 | -1.58 |
| <i>GUK1; YDR454C</i> | 7.93 ± 0.04 | 8.35 ± 0.08 | 1.53 |
| <i>PFY1; YOR122C</i> | 9.44 ± 0.05 | 10.18 ± 0.12 | 2.09 |
| Wild Type Treated versus Untreated | | | |
| Gene | W303-1A \log_2 Mean ± SD | W303-1A + cisPt \log_2 Mean ± SD | FOLD * |
| <i>MET6; YER091C</i> | 10.64 ± 0.14 | 11.68 ± 0.03 | 2.83 |
| <i>LYS20; YDL182W</i> | 8.46 ± 0.10 | 7.95 ± 0.03 | -1.66 |
| <i>ADO1; YJR105W</i> | 8.79 ± 0.10 | 8.35 ± 0.06 | -1.55 |
| <i>ADH1; YOL086C</i> | 12.02 ± 0.08 | 11.83 ± 0.08 | -1.20 |
| <i>ARO4; YBR249C</i> | 7.52 ± 0.14 | 7.08 ± 0.04 | -1.55 |
| Mutant $\Delta skyI$ Treated versus Untreated | | | |
| Gene | $\Delta skyI$ \log_2 Mean ± SD | $\Delta skyI$ + cisPt \log_2 Mean ± SD | FOLD * |
| <i>UGP1; YKL035W</i> | 11.34 ± 0.03 | 11.47 ± 0.05 | 1.14 |
| <i>PRB1; YEL060C</i> | 10.55 ± 0.06 | 10.91 ± 0.02 | 1.44 |
| <i>STII; YOR027W</i> | 10.33 ± 0.07 | 10.38 ± 0.05 | 1.05 |
| <i>BMH1; YER177W</i> | 10.76 ± 0.02 | 10.66 ± 0.10 | -1.11 |
| <i>BMH2; YDR099W</i> | 10.34 ± 0.06 | 10.43 ± 0.09 | 1.09 |
| <i>TMA19; YKL056C</i> | 10.89 ± 0.20 | 10.57 ± 0.10 | -1.39 |
| <i>YLR179C</i> | 7.79 ± 0.03 | 7.62 ± 0.06 | -1.19 |
| <i>GUK1; YDR454C</i> | 8.35 ± 0.08 | 8.19 ± 0.04 | -1.18 |
| <i>ADO1; YJR105W</i> | 8.85 ± 0.03 | 8.40 ± 0.08 | -1.57 |
| Treated Mutant $\Delta skyI$ versus Treated Wild Type | | | |
| Gene | W303-1A + cisPt \log_2 Mean ± SD | $\Delta skyI$ + cisPt \log_2 Mean ± SD | FOLD * |
| <i>HSP26; YBR072W</i> | 10.86 ± 0.10 | 11.15 ± 0.05 | 1.33 |
| <i>AHP1; YLR109W</i> | 11.81 ± 0.04 | 11.68 ± 0.08 | -1.15 |
| <i>YLR179C</i> | 7.71 ± 0.05 | 7.62 ± 0.06 | -1.10 |

Table S2. Cellular abundance and stability of the identified proteins and Sky1 known substrates.

| Spot & | ID ^{\$} | Gene | Molecules/Cell | Instability Index (*) | Classification |
|----------------|------------------|-----------------------|----------------|-----------------------|----------------|
| 290 | 2 | <i>ACS2; YLR153C</i> | 225,000 | 32.03 | stable |
| 310 | 3 | <i>MET6; YER091C</i> | 264,000 | 33.76 | stable |
| 341 | 6 | <i>STII; YOR027W</i> | 67,600 | 39.66 | stable |
| 475 | 8 | <i>UGP1; YKL035W</i> | 17,200 | 31.06 | stable |
| 521 | 9 | <i>SHM2; YLR058C</i> | 67,600 | 27.27 | stable |
| 610 | 10a | <i>ADHI; YOL086C</i> | not reported | 20.71 | stable |
| 610 | 10b | <i>ARO4; YBR249C</i> | 26,300 | 34.92 | stable |
| 537 | 11 | <i>LYS20; YDL182W</i> | 28,100 | 32.87 | stable |
| 684 | 15 | <i>ADO1; YJR105W</i> | 22,200 | 21.59 | stable |
| 924 | 19 | <i>YLR179C</i> | 6230 | 34.17 | stable |
| 1052 | 20 | <i>AHP1; YLR109W</i> | 16,200 | 34.33 | stable |
| 824 | 21 | <i>PRB1; YEL060C</i> | 1600 | 32.36 | stable |
| 1010 | 23 | <i>GUK1; YDR454C</i> | 20,500 | 21.06 | stable |
| 865 | 32 | <i>HSP26; YBR072W</i> | 19,300 | 48.11 | unstable |
| 1293 | 36 | <i>PFY1; YOR122C</i> | not reported | 35.55 | stable |
| 761 | 41 | <i>BMH1; YER177W</i> | 158,000 | 57.99 | unstable |
| 927 | 42 | <i>TMA19; YKL056C</i> | 27,800 | 22.18 | stable |
| Sky1 substrate | | <i>NPL3; YDR432W</i> | not reported | 66.14 | unstable |
| Sky1 substrate | | <i>GBP2; YCL011C</i> | 2540 | 44.70 | unstable |

& Master protein spot number according to black numbers in Figure 1; ^{\$} Identification protein number according to red number in Figure 1; * In log phase SD medium.

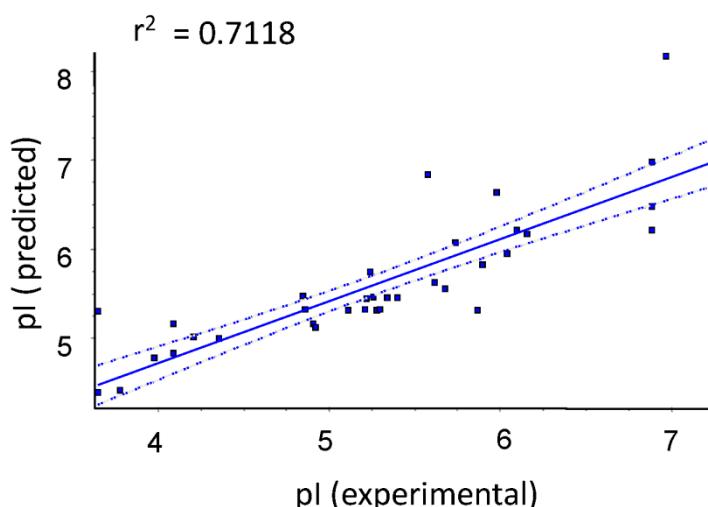
Figure S1. Correlation of predicted and experimental pI.

Figure S2. Control analyses and DIGE design. **(A)** Mono-dimensional silver-stained gel showing the different samples. 1–3, W303-1A without treatment; 4–6, W303-1A treated with cisplatin; 7–9, $\Delta sky1$ without treatment; 10–12, $\Delta sky1$ treated with cisplatin; **(B)** standard silver-stained DIGE gel; **(C)** Design of dyes staining.

