

## Supplementary information for:

### Rapid deacetylation of yeast Hsp70 mediates the cellular response to heat stress

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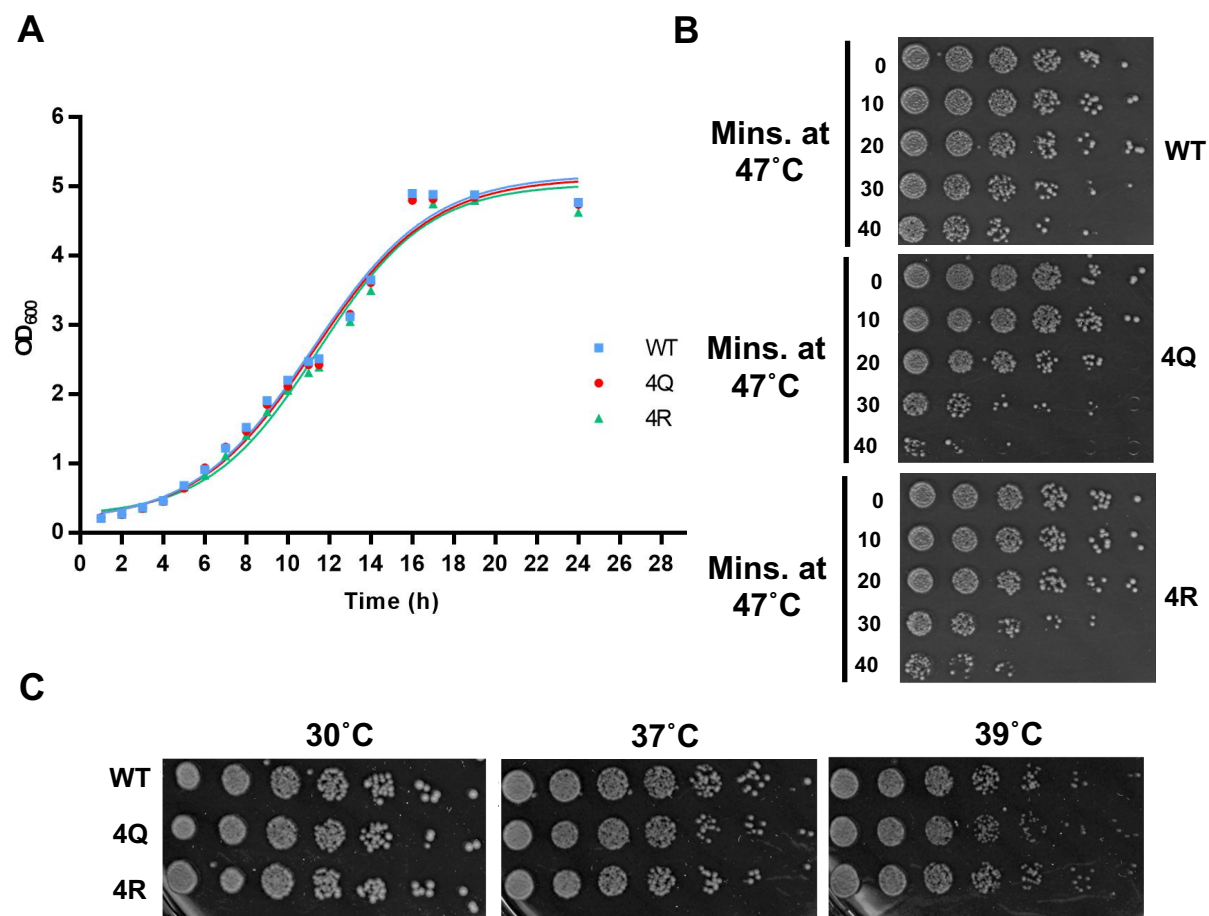
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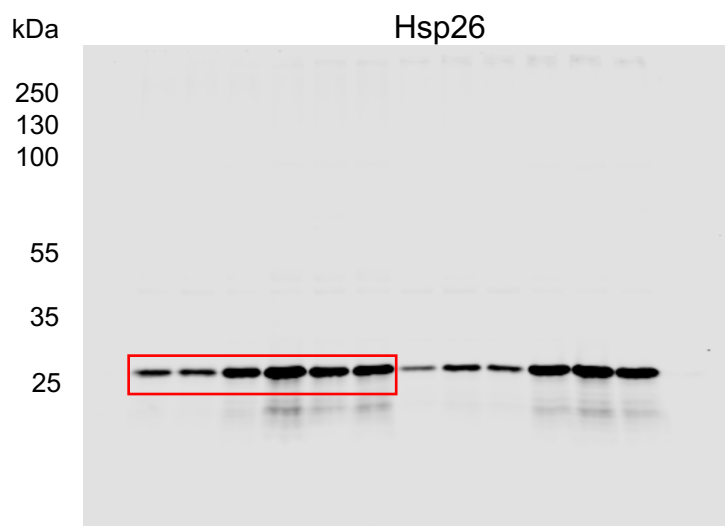
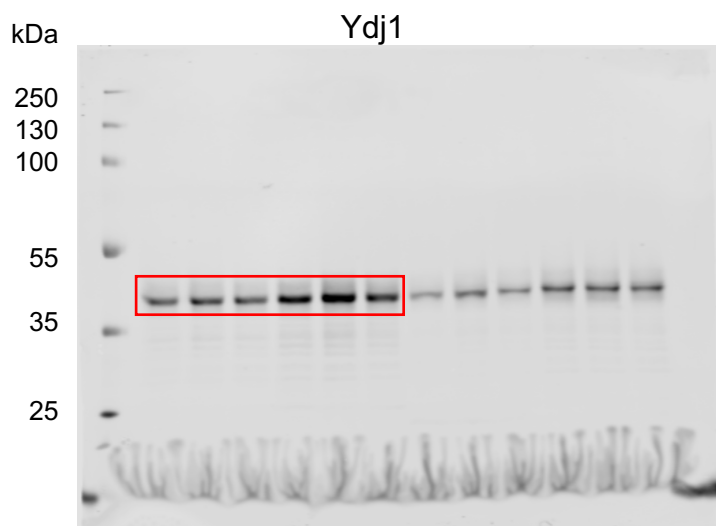
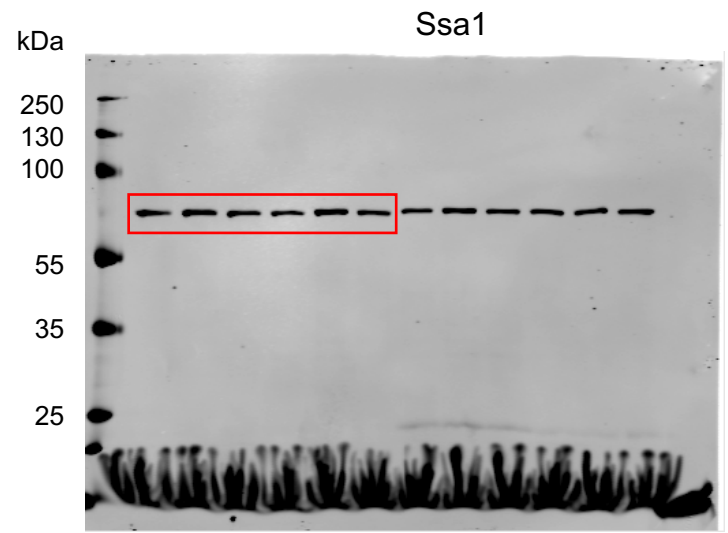
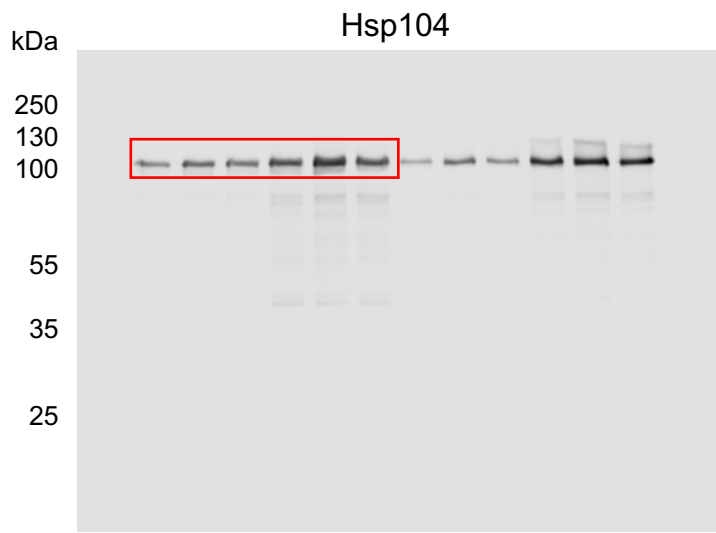
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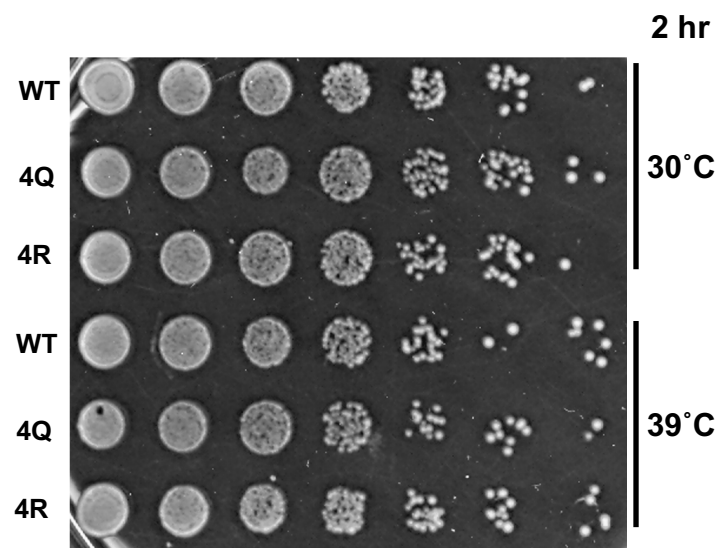
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**Fig. S1. Growth evaluation of MH272 strains.** (A) Growth curves of MH272 strains at 30°C in YPD. (B) Growth assay of the (de)acetylated mutations in Ssa1 at elevated temperatures. (C) Acquired thermotolerance assay of (de)acetylation mutations of Ssa1 at extreme temperature. Fresh cultures were pre-treated at 39°C for 1 h, then cells were heat shocked in a 50°C incubator for a time course (T0-T4 means 0, 10, 20, 30 and 40 min, respectively).



**Fig. S2. Original blots for data shown in Fig. 3D.** Regions used in Fig. 3D are highlighted in red. MW are labelled along with primary antibody used.



**Fig. S3. Viability G402 strains post-heat shock.** Yeast expressing acetylation site mutations were grown to exponential phase, and then fresh cultures were heat shocked at 39°C for 2 h. Cells serially diluted fivefold and plated onto YPD plates. Plates were photographed after 2 days incubation at 30°C.