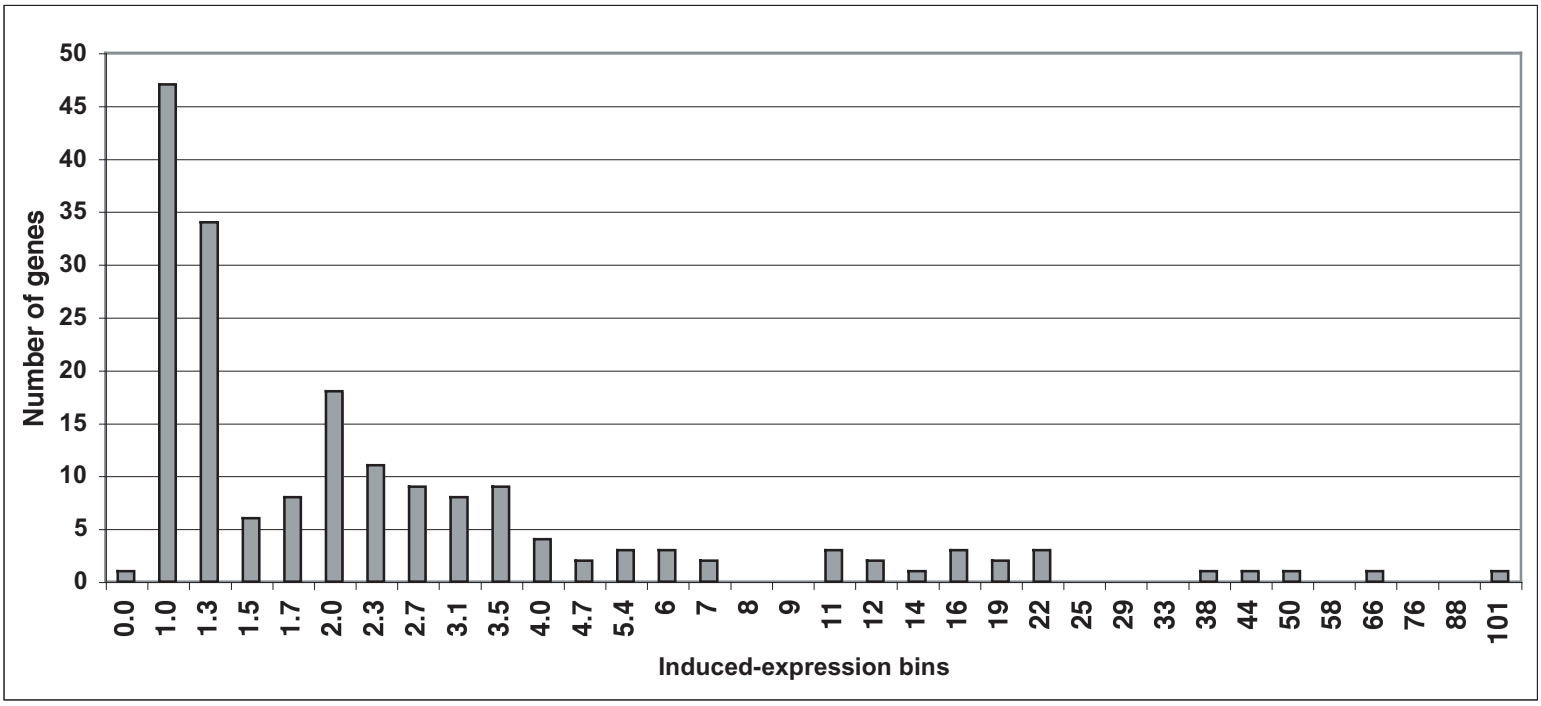
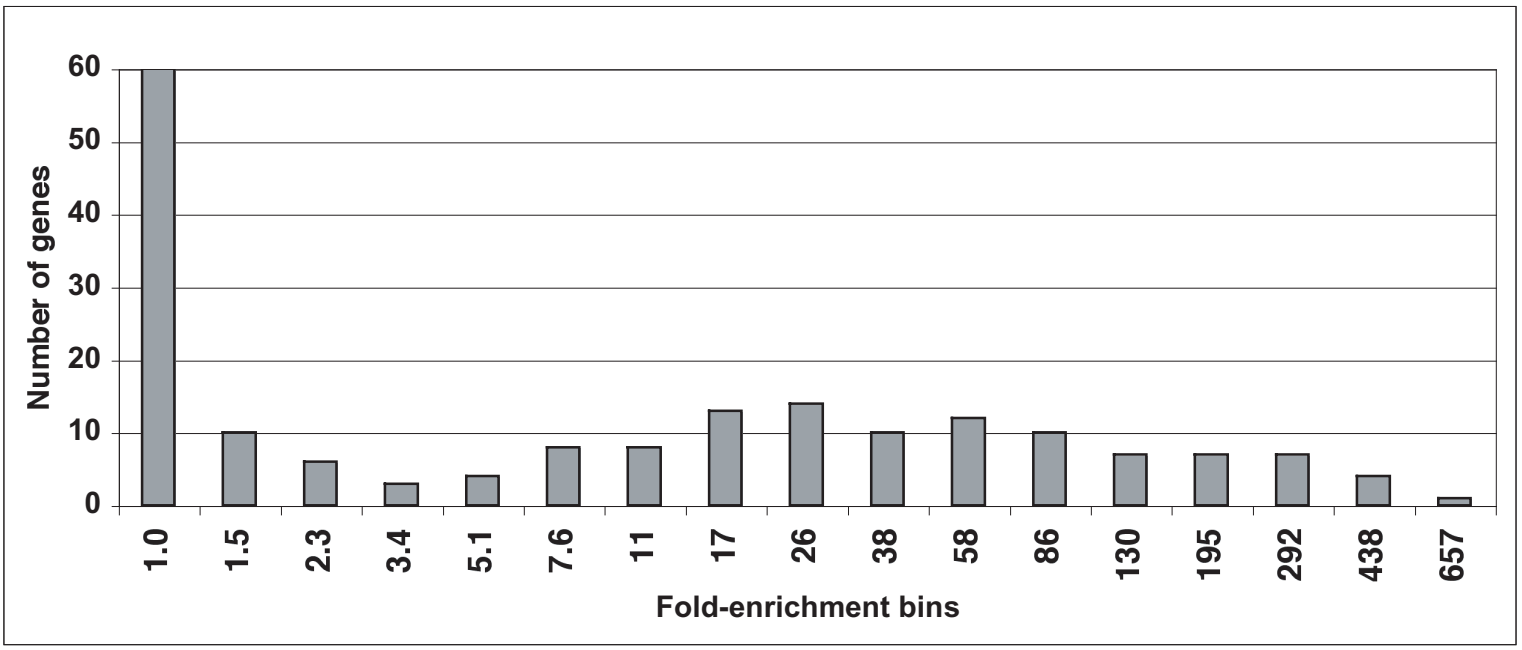
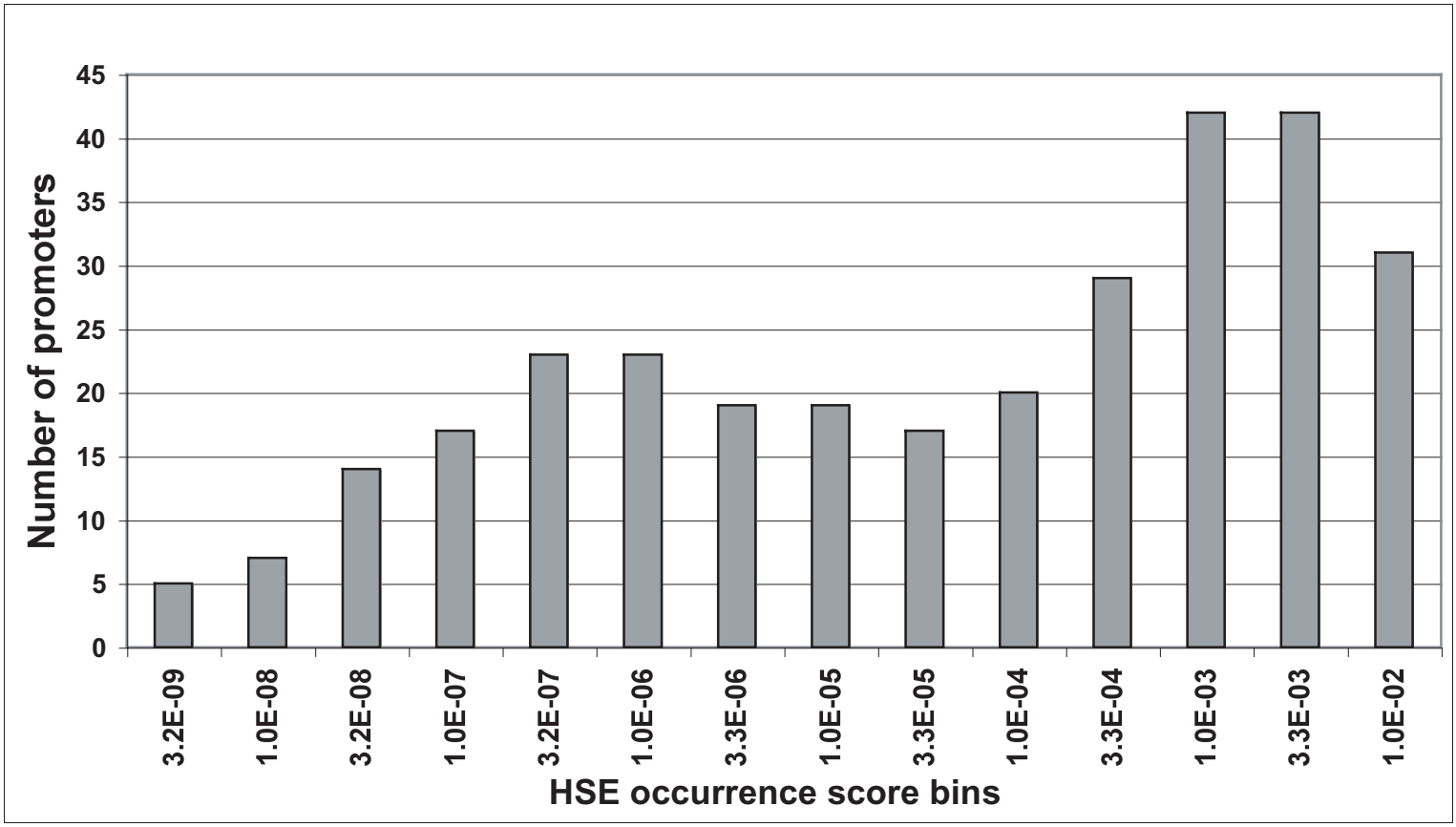


Supplemental figure 6

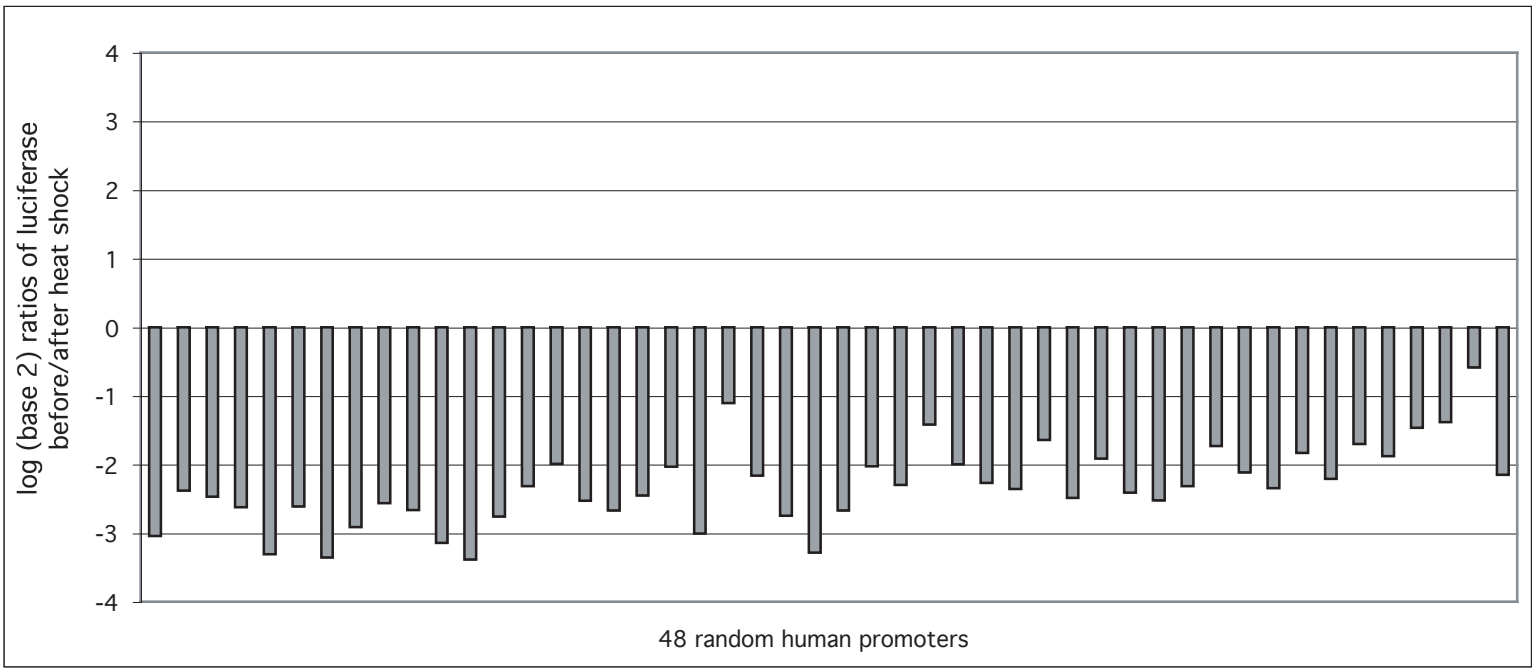


Supplemental figure 7

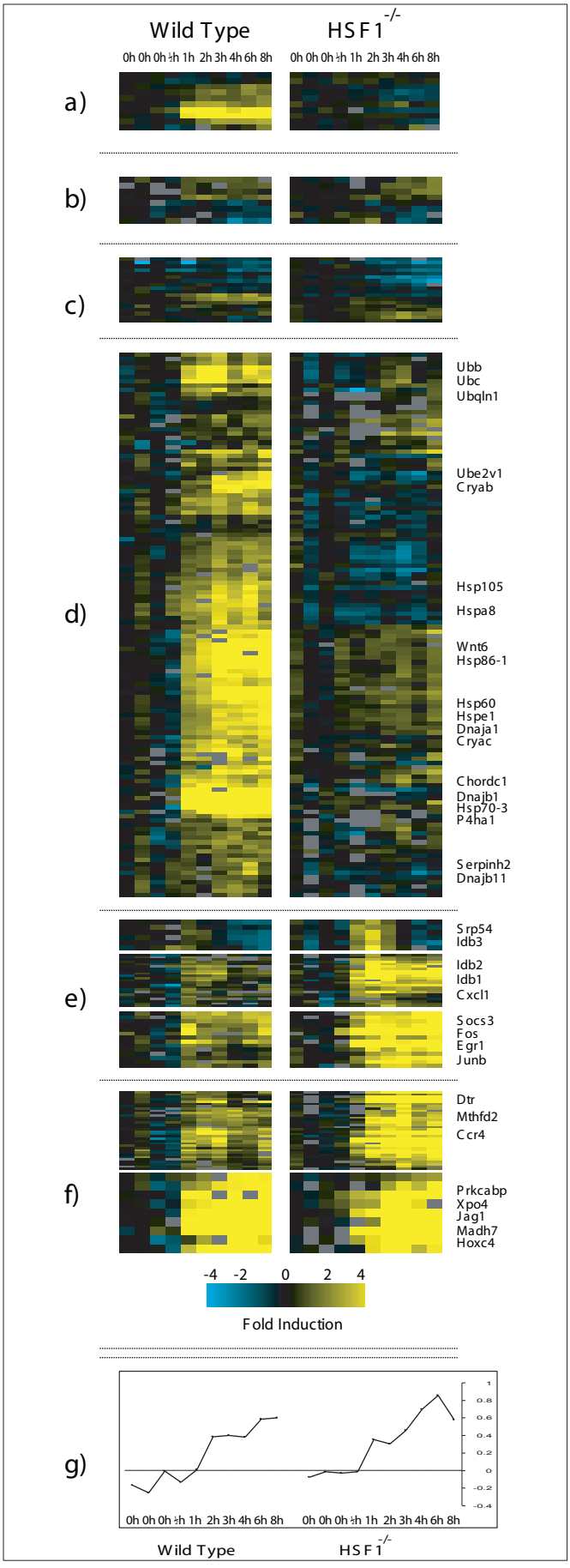


Supplemental figure 8

Supplemental figure 9



Supplemental figure 10


Wild Type
HSF1 -/-
0h 0h 0h ½h 1h 2h 3h 4h 6h 8h
0h 0h 0h ½h 1h 2h 3h 4h 6h 8h
a)
b)
c)
d)
e)
f)
g)
Ubb
Ubc
Ubqln1
Ube2v1
Cryab
Hsp105
Hspa8
Wnt6
Hsp86-1
Hsp60
Hspe1
Dnaja1
Cryac
Chordc1
Dnajb1
Hsp70-3
P4ha1
Serpinh2
Dnajb11
Srp54
Idb3
Idb2
Idb1
Cxcl1
Socs3
Fos
Egr1
Junb
Dtr
Mthfd2
Ccr4
Prkcabp
Xpo4
Jag1
Madh7
Hoxc4
-4 -2 0 2 4
Fold Induction
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
0h 0h 0h ½h 1h 2h 3h 4h 6h 8h
0h 0h 0h ½h 1h 2h 3h 4h 6h 8h
Wild Type
HSF1 -/-

Supplemental Figure 6 – Distribution of fold-induced expression measurements. This figure shows the distribution of all the relative expression measurements made with real-time RT-PCR in the human K562 cell line.

Supplemental Figure 7 – Distribution of HSF1 ChIP-enrichment measurements. This figure show the distribution of all the ChIP-enrichment measurements made with real-time RT-PCR in the human K562 cell line.

Supplemental Figure 8 – Distribution of HSE occurrence scores. This figure show the distribution of all the occurrence scores that were calculated for 2 kb human promoter sequences that were tested for binding of HSF1 by ChIP.

Supplemental Figure 9 – Expanded version of the clustered mouse microarray experiments shown in Figure 4.

Supplemental Figure 10 – Same as the cluster analysis in Figure 4, except that the data from each cell line were transformed by the zero time points. The expression changes in both cell types are shown for A) homologs of a subset of human genes that were HSF1-bound and induced, B) homologs that were bound by HSF1 but not heat induced, and C) homologs that were induced but not bound by HSF1 in the human system. The mouse microarray data was also analyzed independent of the human experiments, and these results show D) genes induced by heat in wild type but not HSF1-/- fibroblasts, E) genes induced in HSF1-/- fibroblasts, and F) genes induced similarly in wild type and HSF1 -/-

fibroblasts. Panel G) shows the average expression profile for spots containing repetitive elements according to RepeatMasker and the standard error of each time point for each cell type.

Supplemental Figure 11 – Promoter activities of 48 random human promoters before and after heat shock. Values on the y-axis are the log (base 2) ratios of promoter activity before and after heat shock.