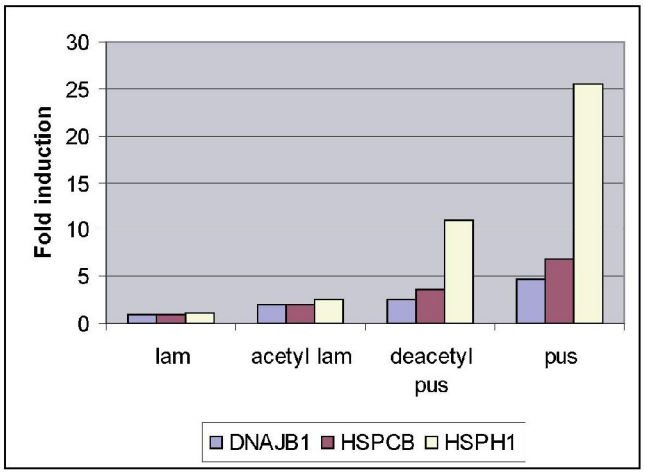
Supplementary Table 1

No.	Affymetrix Probe Set Name	Gene	Fold induction	
			Exp. 1	Exp. 2
1	208744_x_at	HSPH1	4.3	4.9
1	206976_s_at	HSPH1	7.2	9.6
2	205133_s_at	HSPE1	2	9.7
3	200064_at	HSPCB	3	6.7
3	214359_s_at	HSPCB	3.1	7.1
4	211969_at	HSPCA	2.7	5.7
4	210211_s_at	HSPCA	3	5.2
4	211968_s_at	HSPCA	3.6	7.2
5	200690_at	HSPA9B	2.8	3.1
6	202581_at	HSPA1A	10.8	12
7	202842_s_at	DNAJB9	6.8	6.6
7	202843_at	DNAJB9	9.1	9.7
8	200666_s_at	DNAJB1	5.8	10.1
8	200664_s_at	DNAJB1	5.9	11.2

Sup. Fig. 1

Sup. Fig. 1



Sup. Fig. 2

Sup. Fig. 2

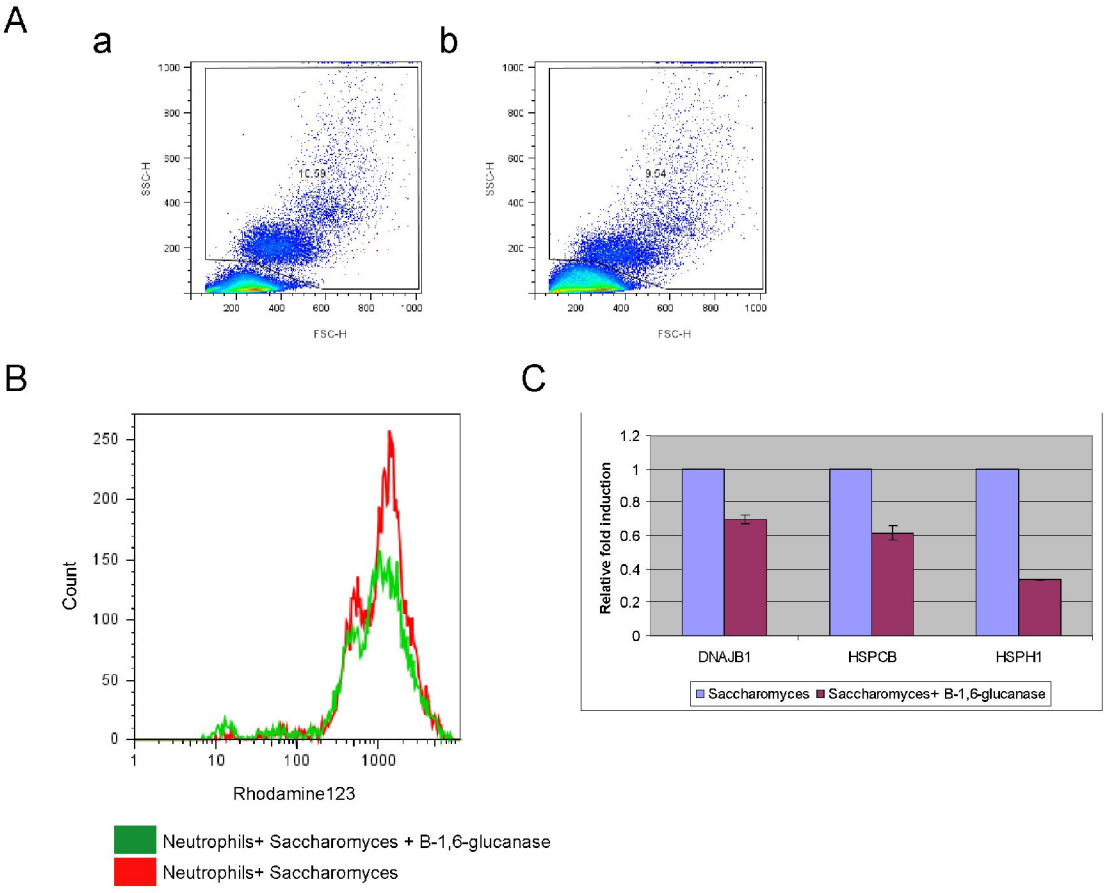


Figure legends

Sup. Table 1. Induction of HSPs following phagocytosis of *Candida* by neutrophils. Neutrophils were cultured with *Candida albicans* for 2 hours at 37°C. Expression levels were determined by microarray analysis. Ratios of expression from neutrophils cultured with *Candida* divided by that from the neutrophils alone control are indicated.

Sup. Fig. 1. Acetylated laminarin does not stimulate expression of heat shock proteins (HSPs) in neutrophils. Induction of HSPs was determined by quantitative real-time PCR. Polybead polystyrene 6 μm microspheres (beads) were coated with an equivalent amount of laminarin (lam), acetylated laminarin (acetyl lam), deacetylated pustulan (deacetyl pus), or pustulan (pus). Beads were opsonized with pooled human serum and cultured for 2 hours with neutrophils.

Sup. Fig. 2. β-1,6-glucan is required for ROS production and expression of HSPs in response to live *Saccharomyces cerevisiae*. Live *Saccharomyces cerevisiae* cells were digested with an endo-β-1,6-glucanase, and opsonized. The strain, EM93, is a feral progenitor of many laboratory strains, which has a high level of exposed β-glucan when grown on standard culture medium (as measured by interaction with an anti-β-glucan antibody (Biosupplies, Australia)). (A) Phagocytosis was assessed by Fluorescence Activated Cell Sorting (FACS) by the change in side scatter. (B) β-1,6-glucan is required for efficient ROS production. ROS production was assayed by FACS using DHR123. (C) β-1,6-

glucan is required for induction of HSPs. HSPs induction was determined by quantitative real-time PCR. Results for β-1,6-glucanase digested *Saccharomyces* were normalized to undigested *Saccharomyces*. The data represent the average of two experiments with standard deviation.

Sup. Movie 1. β-1,3-glucan does not stimulate phagocytosis. Phagocytosis was assessed by time-lapse microscopy for beads coated with laminarin that were opsonized and cultured with neutrophils for 40 minutes.

Sup. Movie 2. β-1,6-glucan stimulates phagocytosis. Phagocytosis was assessed by time-lapse microscopy for beads coated with pustulan that were opsonized and cultured with neutrophils for 40 minutes.