

**Table S2. Cell to cell coefficient of variation (CV) of FP-tagged proteins**

Protein	Abundance (molecules/cell)*	CV of total fluorescence <sup>†</sup>	CV of fluorescence concentration <sup>†,‡</sup>	Number of cells
YFP-Ste5	484	0.284	0.232	1,110
Fus3-YFP	20,413	0.304	0.286	610
Ste7-YFP	924	0.356	0.339	653
CFP-Ste12 <sup>§</sup>	4,170	0.315	0.299	256
Dig1-YFP	4,799	0.396	0.379	256

\*Assumed that abundance of tagged protein is the same as untagged protein; assumption verified for Ste5 by immunoblotting.

<sup>†</sup>CV, coefficient of variation (SD/mean).

<sup>‡</sup>Ste5, Fus3, and Ste7 fluorescence divided by the volume of the whole cell; Ste12 and Dig1 fluorescence divided by the volume of the nucleus.

<sup>§</sup>The CFP-Ste12 gene was present in three copies in the genome (1).

1. Colman-Lerner A, et al. (2005) Regulated cell-to-cell variation in a cell-fate decision system. *Nature* 437:699–706.