

Table 1. Effect of growth substrate on morphology of *S. cerevisiae* cells and mitochondria. Exponentially growing cells were sampled from repeated batch cultures grown on the fermentable substrate glucose or the non-fermentable substrate ethanol.

Growth substrate	Growth phase	Cells			Mitochondria	
		% <sup>1</sup>	volume <sup>2</sup>	N <sup>3</sup>	Number per cell <sup>4</sup>	Relative volume <sup>5</sup>
Glucose	non-budding	48	55	9	2.3	7.4
Glucose	budding	52	79	13	3.2	7.4
Ethanol	non-budding	53	43	11	20–30	6.3
Ethanol	budding	47	63	10	20–30	6.2

<sup>1</sup> The percentage of (non)-budding cells was calculated from ca. 250 measurements with an ordinary light microscope.

<sup>2</sup> The average volume ( $\mu\text{m}^3$ ) was calculated from ca. 250 measurements with an ordinary light microscope.

<sup>3</sup> Number of cells analyzed by CSLM.

<sup>4</sup> Average number of mitochondria per cell as measured by CSLM optical sectioning.

<sup>5</sup> Relative volume of mitochondria as percentage of cell volume.