

Table 2. Summary of nuclear and cell size distributions in asynchronous cultures

Genotype	Carbon source	n	Measured nuclear A (μm^2)		Estimated nuclear V (μm^3)		Measured cell V (μm^3)		N/C volume ratio (%)
			Mean	SD	Mean	SD	Mean	SD	
Wild-type	Glucose	271	2.44	0.48	2.91	0.85	41.8	16.5	7.0
	Galactose	185	2.37	0.54	2.80	0.95	35.7	15	7.9
	Raffinose	287	2.09 ^a	0.51	2.33	0.86	30.9	12.9	7.5
<i>GALI-CLN3-1</i>	Glucose	419	3.17 ^a	0.67	4.31	1.36	63	27.2	6.8
	Galactose	539	1.83 ^b	0.39	1.89	0.61	30.4	18.1	6.2
<i>whi5</i> Δ	Glucose	369	2.12 ^a	0.43	2.35	0.73	33.3	13.8	7.1
<i>sch9</i> Δ	Glucose	357	1.70 ^a	0.45	1.72	0.69	26	13.1	6.6
<i>sfp1</i> Δ	Glucose	367	1.54 ^a	0.39	1.47	0.56	27.4	16	5.4

Strains were propagated to log phase in synthetic medium with the indicated carbon source, and the area (A) of a nuclear cross-section was determined for n cells. All strains were in the S288c background and were congeneric except at the noted alleles. Nuclear volume (V) was estimated under the assumption that each nucleus was spherical. Cell volume distributions were directly measured with a Coulter particle analyzer and a representative distribution was analyzed. The mean and SD of each distribution were calculated.

^a The mean nuclear A measurement is significantly different from that for wild-type cells in glucose medium (Student's *t* test, $p < 10^{-15}$).

^b The mean nuclear A measurement is significantly different from that for wild-type cells in galactose medium (Student's *t* test, $p < 10^{-27}$). The difference between the mean nuclear area of wild-type cells in glucose and galactose was not significant (Student's *t* test, $p > 0.05$).