

Table 5
Parameters of equivalent homogeneous solutions

Growth phase of cells	Estimated excluded volume fraction in cytoplasm, Φ^\dagger (ml/ml)	Two-phase assay		Gel filtration	
		R_c (nm)	$d_c^\ddagger \times 10^{-18}$ (cm ⁻³)	R_a (nm)	$d_a^\S \times 10^{-18}$ (cm ⁻³)
Exponential	0.34	3.06	2.8	3.17	2.6
	0.44	3.52	2.4	3.51	2.4
Stationary	0.34	2.88	3.4	3.10	2.7
	0.44	3.30	2.9	3.43	2.6

† Using eqn (10) with $C_{\text{cytoplasm}} = 0.34$ g/ml and $v = 1.0$ or 1.3 ml/g.

‡ Number density of particles of radius R_c for the excluded volume fraction in column 2.

§ Number density of particles of radius R_a for the excluded volume fraction in column 2.