

Table 2. Predicted, cytoplasmic DCs of small amino acids, sugars, selected proteins and ribosomes and DNA constructs

Molecule	r_p (nm)	D_{cyto} ($\mu\text{m}^2/\text{s}$)
Guanine	0.29	539
Histidine	0.32	478
Galactose	0.33	458
Arginine	0.34	428
Lactose	0.41	328
ATP	0.43	302
TrpR–Monomer	2.1	19.71
TrpR–Dimer	2.7	10.92
LacI–Monomer	3.2	7.28
LacI–Tetramer	5.6	1.79
RNAP Holoenzyme	8.5	0.5
Ribosome 30s	11.6	0.18
Ribosome 50s	13.2	0.11
Ribosome 70s	16.6	0.05
Pyes2	142 ^a	1.13×10^{-4}
CTD-2657L24	802 ^b	1.62×10^{-5}

^aHydrodynamic radius calculated using Equation (3).

^bHydrodynamic radius calculated using Equation (5).