

Table 1 Corral size and diffusion coefficients of particles in the nucleus and chromatin loci

Particle/locus	r_c (nm) ^a	D ($\mu\text{m}^2 \text{s}^{-1}$)	Reference
Mx1-YFP ^b	280	1.8×10^{-4}	Görisch et al. 2004
Cajal bodies ^b	310	1.1×10^{-4}	Görisch et al. 2004
PML bodies ^b	260	1.2×10^{-4}	Görisch et al. 2004
Nanospheres ^c	150	4×10^{-4}	Tseng et al. 2004
Nucleoplasmic chromatin ^d	240	1.3×10^{-4}	Chubb et al. 2002
Telomeres ^e	230	1.8×10^{-4}	Molenaar et al. 2003
Dense chromatin regions	180	4.8×10^{-5}	Görisch et al. 2004
1-Mb chromatin domain	–	$0.5\text{--}1.5 \times 10^{-5}$	Bornfleth et al. 1999

^aThe size of the region in which a given particle or the chromatin locus can translocate its centre of mass during an observation time of up to a few minutes is defined by a circle with radius r_c

^bThe given diffusion coefficient refers to the value D_c according to Eq. 4, which is believed to reflect the mobility of the chromatin environment

^cThe value of D was determined from MSD measurements at times from 3 s to 10 s

^dA lacO array with integration site 5p14 was studied, which corresponds to a G band with a preferred localisation in the interior of the nucleoplasm

^eValue observed for the majority of telomeres. A ~10% fraction of telomeres showed a higher mobility with a diffusion coefficient of $D = 5.8 \times 10^{-4} \mu\text{m}^2 \text{s}^{-1}$