

TABLE 9.3 DNA CONTENT OF HUMAN CHROMOSOMES

Chromosome	Total DNA (Mb)	Euchromatin (Mb)	Heterochromatin (Mb)	Chromosome	Total DNA (Mb)	Euchromatin (Mb)	Heterochromatin (Mb)
1	249	224	19.5	13	115	96.3	17.2
2	243	240	2.9	14	107	88.3	17.2
3	198	197	1.5	15	103	82.1	18.3
4	191	188	3.0	16	90	79.0	10.0
5	181	178	0.3	17	81	78.7	7.5
6	171	168	2.3	18	78	74.6	1.4
7	159	156	4.6	19	59	60.8	0.3
8	146	143	2.2	20	63	60.6	1.8
9	141	120	18.0	21	48	34.2	11.6
10	136	133	2.5	22	51	35.1	14.3
11	135	131	4.8	X	155	151	3.0
12	134	131	4.3	Y	59	26.4	31.6

Chromosome sizes are taken from the ENSEMBL Human Map View (http://www.ensembl.org/Homo_sapiens/Location/Genome). Heterochromatin figures are estimates abstracted from International Human Genome Sequencing Consortium (2004) *Nature* 431, 931–945. The size of the total human genome is estimated to be about 3.1 Gb, with euchromatin accounting for close to 2.9 Gb and heterochromatin accounting for 200 Mb.