

TABLE 1
Approximate genome sizes and gene contents of various prokaryotes and eukaryotes

Organism	Approximate amount of DNA (Mbp)	Estimated	
		# genes	% coding
Prokaryotes (~50× range in size and # genes)			
<i>Carsonella ruddii</i> Pv	0.16	180	97
<i>Buchnera aphidicola</i> BCc	0.4	400	90
<i>Nanoarchaeum equitans</i>	0.5	500	90
<i>Mycoplasma genitalium</i>	0.5	500	90
<i>Haemophilus influenzae</i>	1.8	1,800	90
<i>Escherichia coli</i> K12 (MG1655)	4.5	4,500	90
<i>Streptomyces coelicolor</i>	9.0	8,000	90
Eukaryotes (~10,000x range in size; 10 to 20x range in # genes)			
Yeast (<i>Saccharomyces cerevisiae</i>)	15	6,500	50
Worm (<i>Caenorhabditis elegans</i>)	100	20,000	25
Thale cress (<i>Arabidopsis thaliana</i>)	160	27,000	21
Rice (<i>Oryza sativa</i>)	490	41,000	15
Mammal (<i>Homo sapiens</i>)	4,000	~40,000	1
Onion (<i>Allium cepa</i>)	16,400	~50,000	0.3
Salamander (<i>Ambystoma tigrinum</i>)	31,000	~50,000	0.2
Lungfish (<i>Protopterus aethiopicus</i>)	130,000	~50,000	0.05