

## Denaturing polyacrylamide gels: Migration of marker dyes

(Adapted from Sambrook et al., 1989)

% Acrylamide	Bromphenol Blue*	Xylene Cyanol*
5.0	35	130
6.0	26	106
8.0	19	76
10.0	12	55

\* Approximate size of DNA fragments (in nucleotides) with which the dyes would migrate. (Acrylamide: Bisacrylamide (w/w) should be 29:1.)

## Agaroses and molecular weight markers

see inside back cover page.

## Stains and tracker dyes

Compound	MW	Application	Concentration
<b>Acridine Orange</b>	301.8	DNA, RNA stain in gel electrophoresis	1 – 10 µg/ml in staining solution
<b>Bromphenol Blue</b>	670.0	Gel electrophoresis marker dye	0.01 – 0.05% in gel loading buffers
<b>Ethidium bromide</b>	394.3	Fluorescent dye for DNA/ RNA in density gradients and electrophoresis gels	1 µg/ml in running buffer or staining solution
<b>Xylene Cyanol</b>	554.6	Gel electrophoresis marker dye	0.01 – 0.05% in gel loading buffers

## IV. Other Useful Information

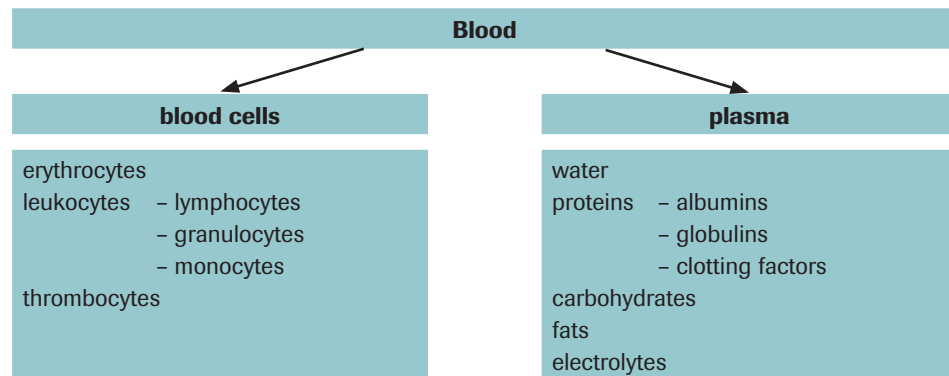
### Length of rRNAs from various species

(Lewin, 1987)

Species	RNA	Length (bases)
<i>E. coli</i>	16 S rRNA	1542
	23 S rRNA	2904
Yeast ( <i>S. cerevisiae</i> )	18 S rRNA	2000
	28 S rRNA	3750
<i>Drosophila</i> ( <i>D. melanogaster</i> )	18 S rRNA	2000
	28 S rRNA	4100
Mammal	18 S rRNA	1874
	28 S rRNA	4718

## Blood and its components

(For further information, see Czihak et al., Masseyeff et al.)



**Serum:** Clear, yellowish fluid that separates from blood when it clots. Serum, unlike plasma, does not contain fibrinogen; serum also lacks several clotting factors present in plasma.

**Buffy coat:** Following centrifugation of whole blood, the buffy coat is the interface layer of material between the plasma-containing upper phase and the erythrocyte-containing lower phase. It is comprised of leukocytes and thrombocytes.

## References

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