NUCLEIC ACIDS

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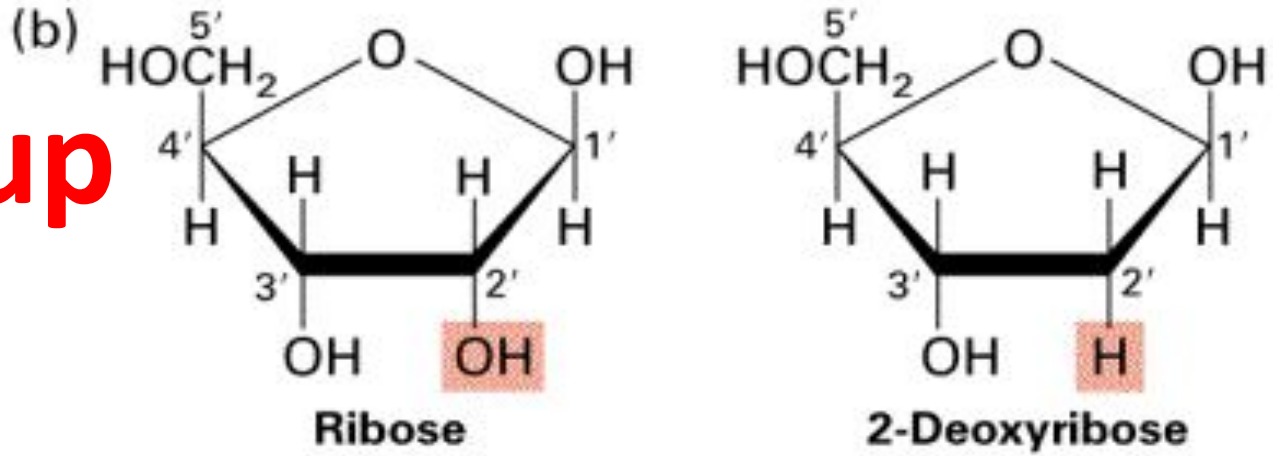
- Nucleic acids contain C, O, H, N, and P.
- They are master molecules of cell.
- Plays crusial role in *regulating cell activity*
- They are very *large polymers*, which consists of *monomers* called nucleotide.

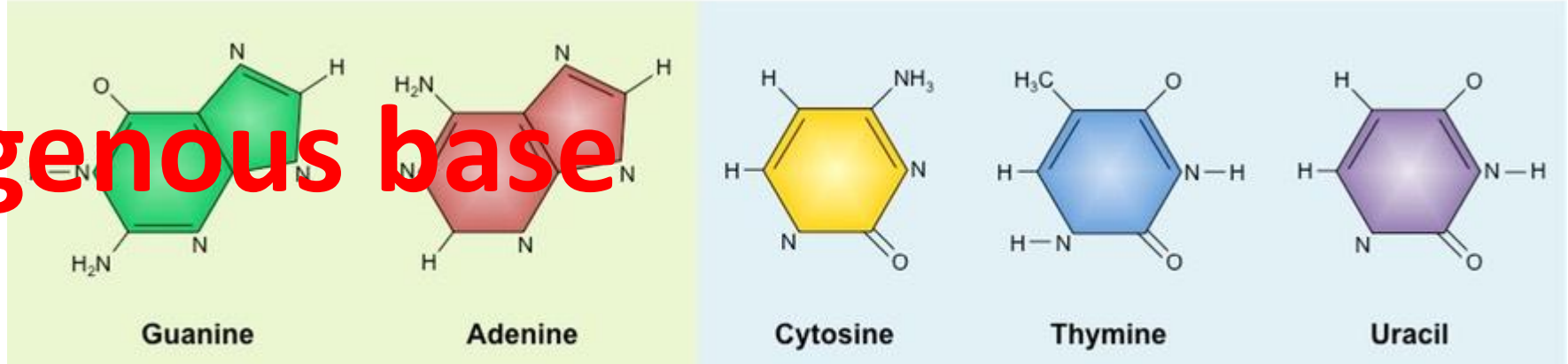
Structure of nucleotide

- 1 Phosphate group



- 2 Pentose sugar

- 3 Nitrogenous base

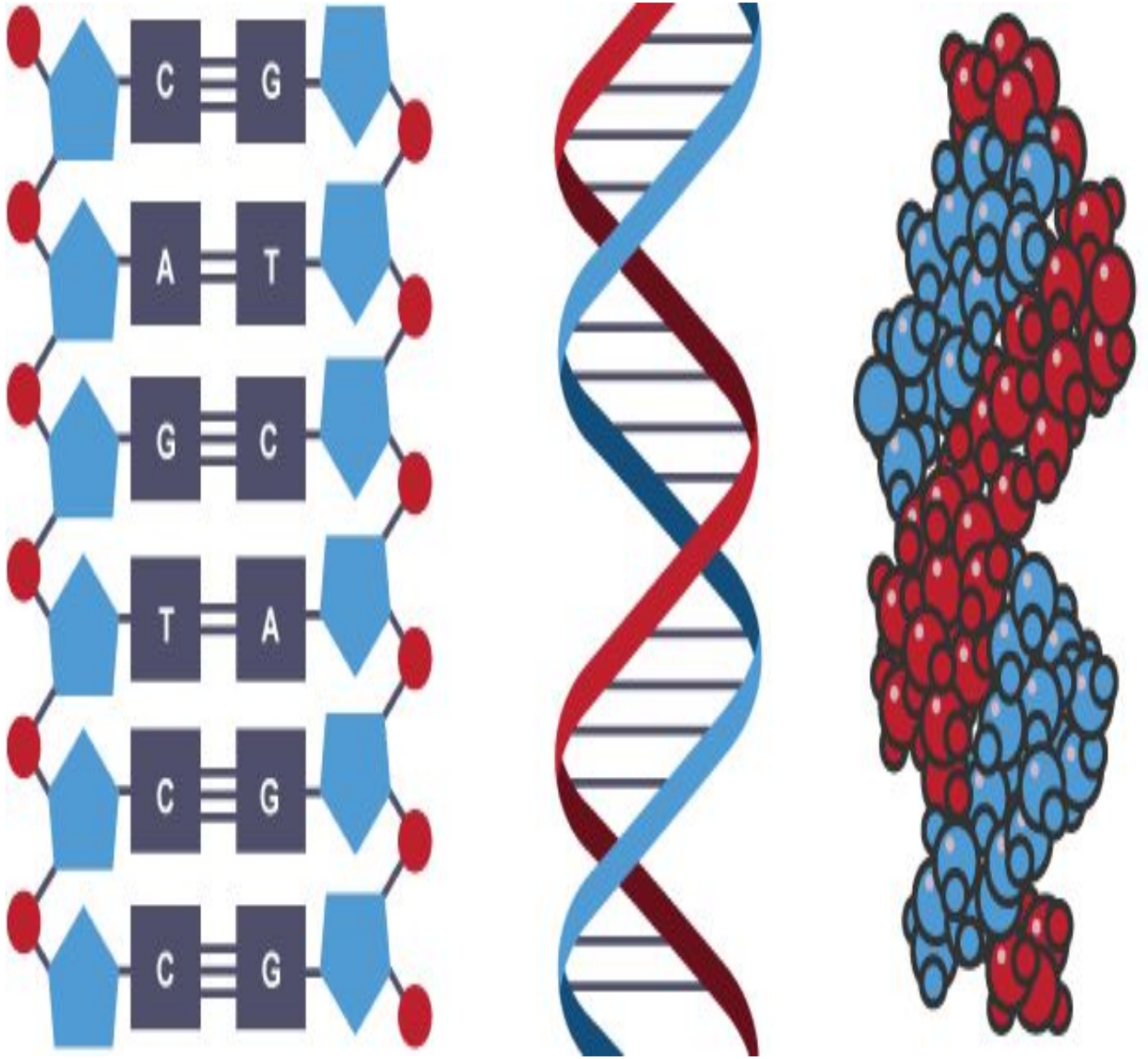


TYPES OF NUCLEIC ACID

- DNA(Deoxyribosic NA) RNA(Ribonucleic acid)
- *Double* helix *Single* stranded
- Nitrogenous bases: Nitrogenous bases:
- A, G, C and *THYMINE* A, G, C and *URACIL*

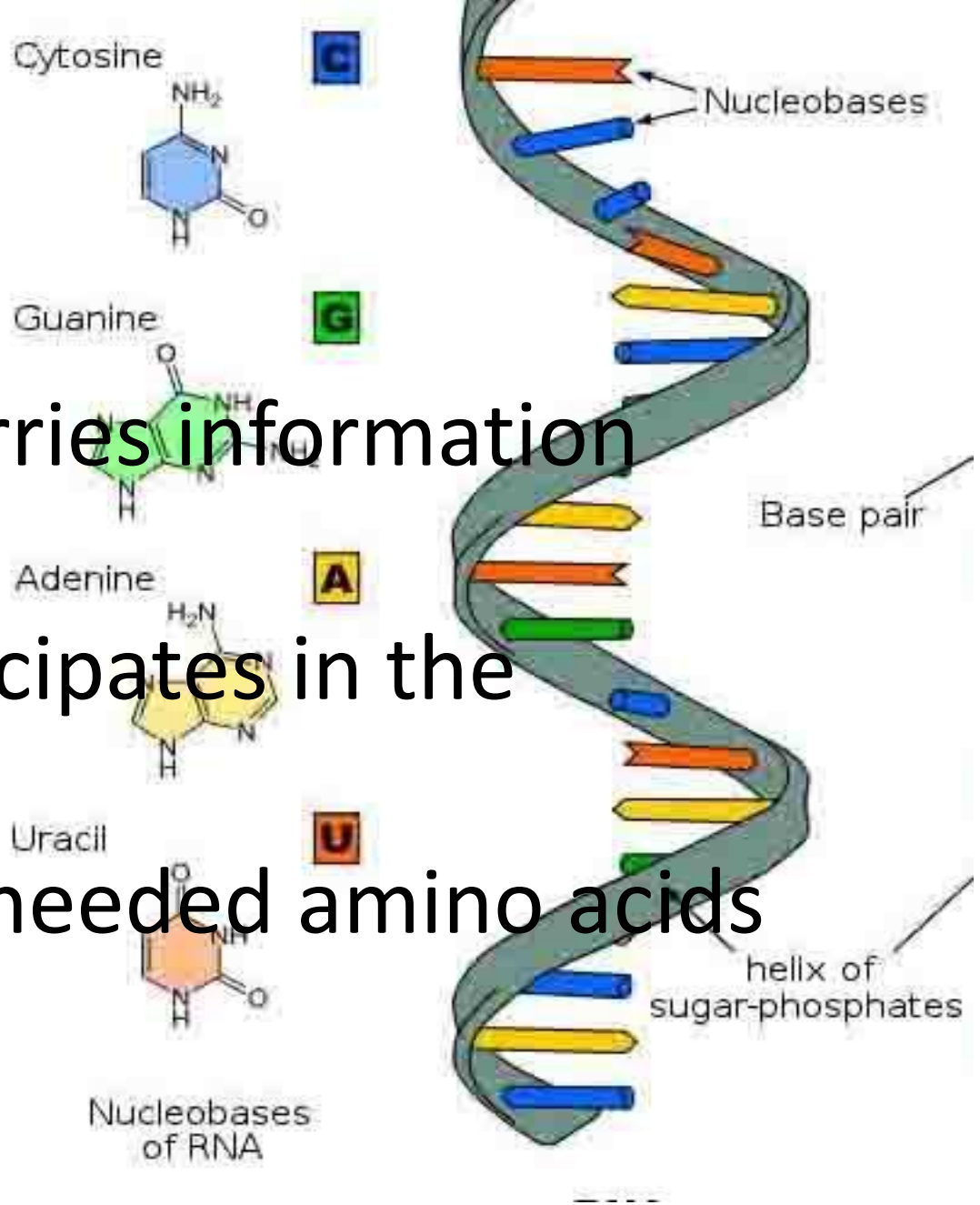
DNA

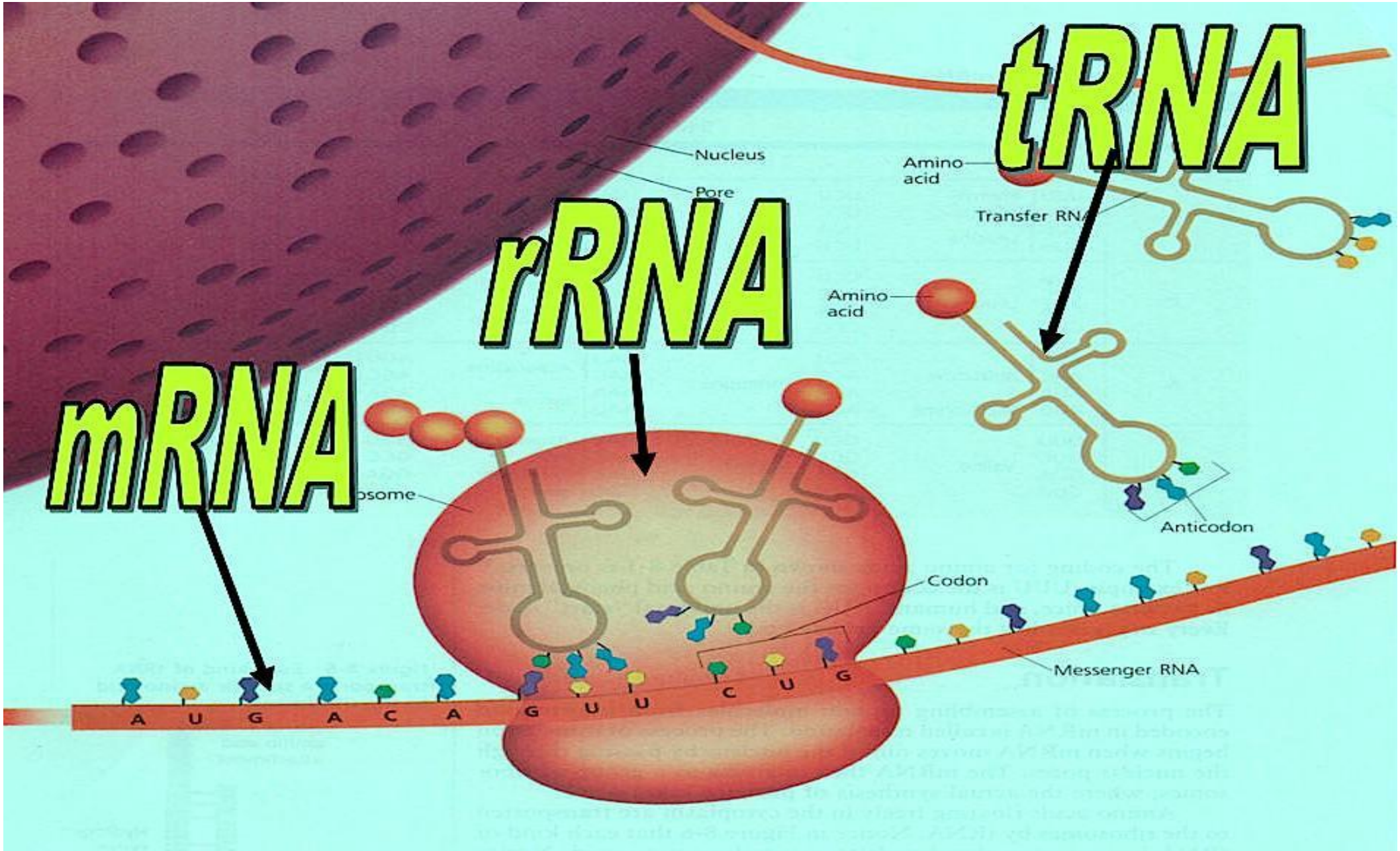
- Storage genetic information
- Regulation of protein synthesis and RNA



RNA

- *Synthesized* from DNA
- *Messenger* RNA(mRNA) - carries information from DNA to ribosome
- *Ribosomal* RNA(rRNA)- participates in the structure of ribosome
- *Transfer* RNA(tRNA)- brings needed amino acids to the ribosome




tRNA
rRNA
mRNA
Nucleus
Pore
Amino acid
Transfer RNA
Amino acid
Anticodon
Codon
Messenger RNA
A U G A C A G U U C U G