

RNA

12

- ① It is a single strand
- ② made of repeating strands of nucleotides (contains parts similar to DNA except for T, it is U)

Types of RNA:

- ① mRNA
"messenger"
→ made using DNA
→ carries genetic info from nucleus to ribosome.
→ every 3 bases specifies an amino acid

RNA * does not obey Chargaff
DNA * follows Chargaff's Rule

- ② tRNA
"transfer"
→ transfers amino acid to growing protein
→ cloverleaf shape
→ 3 anticodons or complementary bases bind to mRNA codon.

- ③ rRNA
"ribosomal"
→ makes bulk of ribosomes & its subunits

RNA Type	Size	Function
Transfer RNA	Small	Transports amino acids to site of protein synthesis
Ribosomal RNA	Several kinds—variable in size	Combines with proteins to form ribosomes, the site of protein synthesis
Messenger RNA	Variable	Directs amino acid sequence of proteins
Small nuclear RNA	Small	Processes initial mRNA to its mature form in eukaryotes
Small interfering RNA	Small	Affects gene expression; used by scientists to knock out a gene being studied
Micro RNA	Small	Affects gene expression; important in growth and development
Long noncoding RNA	Variable (long)	Still under debate, but appears to affect development and be related to certain disease states.