

# Primary structure of nucleic acids

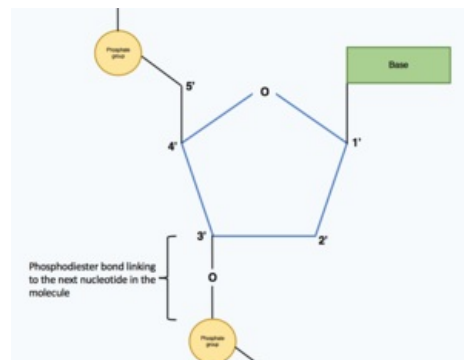
Mononucleotides are linked by phosphodiester bonds in **oligonucleotides** and **polynucleotides**. Phosphate usually binds C5' of one pentose to C3' of the following saccharide, so the axis of the polynucleotide is a chain in which pentose and phosphate alternate. The described phosphodiester bonds are the cause of chain polarity. By convention, **5'-end** is written on the left and **3'-end** on the right.

Nucleic Acids are extraordinarily long molecules, yet methods have been found to solve their **primary structure** (order or sequence of nucleotides). The procedures are based on an appropriately chosen cleavage of the polynucleotide.

## Links

### Related Articles

- The structure of nucleic acids
- Basic components of nucleic acids
- Nucleic acid hydrolysis
- Sequencing Methods
- Secondary structure of DNA
- Nucleic acid denaturation, molecular hybridization
- RNA Secondary Structure
- Topology of DNA
- Interaction of DNA with proteins
- Bacterial chromosome
- Eukaryotic Chromosomes
- Mitochondrial DNA



Nucleotide structure within a polynucleotide chain

### Resources

- ŠTÍPEK, Stanislav. *Stručná biochemie : Uchování a exprese genetické informace*. 1. edition. Medprint, 1998. 92 pp. ISBN 80-902036-2-0.