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ISSN: 2329-6798
Modern Chemistry & Applications

Perspective

Extraction Process of Nucleic Acid

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DESCRIPTION

Nucleic acid is naturally occurring chemical compound that is capable of being broken down to yield phosphoric acid, sugars, and a combination of organic bases pyrimidine. Nucleic acids are the main information-carrying molecules of the cell, and, through directing the procedure of protein synthesis, they determine the inherited characteristics of every living thing. Nucleic acid is an important class of macro molecules found in cells and viruses. The main function of nucleic acids has to do with the storage and expression of genetic information. Deoxyribonucleic Acid encodes the information of cell needs to make proteins. The main types of nucleic acids are divided into two parts they are deoxyribonucleic acid (DNA) and ribonucleic acid (RNA). Two examples of nucleic acids consist of deoxyribonucleic acid it is also called as DNA and ribonucleic acid is also called as RNA.

The main classes of nucleic acids are Deoxyribonucleic Acid and Ribonucleic Acid. Deoxyribonucleic Acid (DNA) is the master blueprint for life and constitutes the genetic material in all free living organisms and viruses. Ribonucleic Acid (RNA) is the genetic material of certain viruses, but it is also found in all living cells, where it plays an important role in certain techniques including the making of proteins. Nucleic acids are biopolymers, macromolecules, essential to all known types of life. They are composed of nucleotides, which are the monomers made of three components they are 5-carbon sugar, phosphate organization and nitrogenous base. The most important instructions of nucleic acids are Deoxyribonucleic Acid and Ribonucleic Acid. If the sugar is ribose, the polymer is RNA, and if the sugar is the ribose derivative deoxyribose, the polymer is DNA.

Nucleic acids are naturally occurring chemicals that serve as the primary data-carrying molecules in cells and make up the genetic material. Nucleic acids are found in abundance in all living things, where they encode, and then store data of each living cell of every life-form on Earth. In turn, they function to transmit and express that information inside and outside the cell nucleus to the interior operations of the cell and ultimately to the next technology of every living organism. The encoded data is contained and conveyed through the nucleic acid sequence, which provides the 'ladder-step' ordering of nucleotides within the molecules of RNA and DNA. Nucleic acids are playing an important role in directing protein synthesis.

There are five easy parts of nucleic acids. All nucleic acids are made up of the same building monomers. Chemists are calling the monomers "nucleotides". The five parts of nucleic acids are uracil, cytosine, thymine, adenine, and guanine. No matter what technology class you are in, you will always hear about ATCG when looking at DNA. During the period 1920-1945, naturally occurring nucleic acid polymers DNA and RNA were thought to contain only four parts of canonical nucleosides. The four parts of canonical nucleosides are adenosine, cytosine, guano sine, and thymidine. The only difference there is the replacement of the protons from the phosphoric acid with protons from the sugar molecules of the nucleotide. This leaves only one remaining proton, which is very acidic and that easily lost proton is what causes nucleic acids to be so acidic.

These molecules are composed of long strands of nucleotides held together through covalent bonds. Nucleic acids can be found in the nucleus and cytoplasm of our cells. It is found in all cells and some viruses. Nucleic acids have various types of functions, including cell creation, the storage and processing of genetic information, and the generation of energy cells. The main three functions of nucleic acids are gene expression and regulation of cellular activities, storage and transmission of genetic information.

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Received: 01-Mar-2022, Manuscript No. MCA-22-16234; **Editor assigned:** 04-Mar-2022, Pre QC No. MCA-22-16234 (PQ); **Reviewed:** 18-Mar-2022, QC No. MCA-22-16234; **Revised:** 25-Mar-2022, Manuscript No. MCA-22-16234 (R); **Published:** 04-Apr-2022, DOI: 10.35248/2329-6798.22.10.345.

Citation: Shi B (2022) Extraction Process of Nucleic Acid. Modern Chem Appl. 10:345.