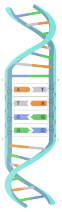


# NUCLEIC ACIDS

*updated: July 7, 2024*

**En Español**

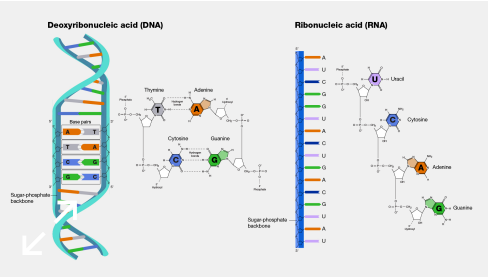
## Definition

00:00 00:40



BIO-RAD EX.1036.001

Nucleic acids are large biomolecules that play essential roles in all cells and viruses. A major function of nucleic acids involves the storage and expression of genomic information. Deoxyribonucleic acid, or DNA, encodes the information cells need to make proteins. A related type of nucleic acid, called ribonucleic acid (RNA), comes in different molecular forms that play multiple cellular roles, including protein synthesis.




**En Español**

---

# Narration

00:00 00:56



BIO-RAD EX.1036.002

Believe it or not, there are many songs devoted to nucleic acids. Something about them inspires art. I won't sing any of them, but I did first learn about nucleic acids through a song in chemistry class. Nucleic acids are made of nitrogen-containing bases, phosphate groups, and sugar molecules. Each type of nucleic acid has a distinctive structure and plays a different role in our cells. Researchers who first explored molecules inside the nucleus of cells found a peculiar compound that was not a protein or a lipid or a carbohydrate. It was new. The discovery of this molecule — nuclein, which upon further understanding became nucleic acid — set in motion the eventual discovery of DNA.

**En Español**

**Sarah A. Bates, M.S., M.A.**
Communications Director
Office of Communications

## Search

type to searc

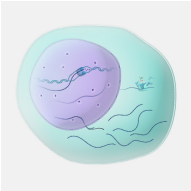
## Related



BIO-RAD EX.1036.003

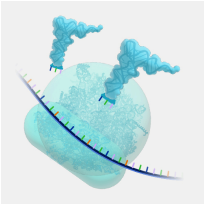
**Back to Glossary**

**Deoxyribonucleic Acid (DNA)**



**Gene Expression**

**Protein**



**Ribonucleic Acid (RNA)**

**En Español**



BIO-RAD EX.1036.004