

## **Answer on Question #49136, Biology, Other**

**Question:** how does the structure of chromosomes differ in prokaryotes and eukaryotes?

**Answer:** Prokaryotes have only one circular-shaped molecule of DNA without any attached proteins. This structure is called nucleoid. Eukaryotes have more complex structure of chromosomes: DNA which is wrapped around histones (type of structural proteins) with formation of chromatin structures. In prokaryotes DNA is located in cytoplasm, when in eukaryotes chromosomes are organized within the nucleus.