

# Prokaryote

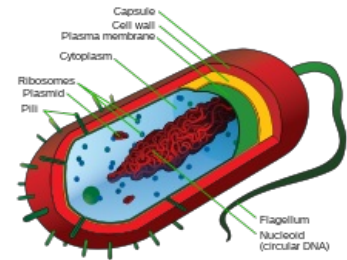
**Prokaryotes** form a class of primordial nuclear organisms. It includes the domains:

- Archaea
- Bacteria

## Bacteria

These are the simplest organisms that can be considered as **living** according to the cell theory and the definition of life. **Bacteria** are cosmopolitan and a huge number of species is known today. From a medical point of view, only a **very small part** is important, which can be the cause of infectious diseases for humans.

You can find more detailed information on the Bacteria page



General structure of a prokaryotic cell

## Cyanophyta (Cyanobacteria)

Developmentally they occupy the same level as bacteria. They are prokaryotic, **autotrophic** organisms with **non-membrane organelles (thylakoids)**, which contain **chlorophyll**, **phycocyanin** and other dyes used in **photosynthesis**. They live in water and in humid places. Cyanobacteria are considered to be probably the first source of O<sub>2</sub> in the Earth's atmosphere.

## Links

### Related articles

- Cell
- Bacterial structure
- Reproduction of bacteria
- Parasexual processes in bacteria
- Regulation of gene expression in prokaryotes

### Source

- ŠTEFÁNEK, Jiří. *Medicína, nemoci, studium na 1. LF UK* [online]. [cit. 2009]. <<http://www.stefajir.cz>>.
- NEČAS, Oldřich. *Obecná bioogie pro lékařské fakulty*. 3. edition. Jinočany : H+H, 2000. ISBN 80-86022-46-3.

Portal: Biology Portal: Genetics Portal: Microbiology