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# Cytogenetics

National Human Genome Research Institute (NHGRI)

## Source

*National Human Genome Research Institute (NHGRI). Cytogenetics.*

Cytogenetics is the branch of genetics that studies the structure of DNA within the cell nucleus. This DNA is condensed during cell division and form chromosomes. The cytogenetic studies the number and morphology of chromosomes. Using chromosome banding techniques (classical cytogenetics) or hybridization fluorescently labeled probes (molecular cytogenetics). The number and morphology of chromosomes in a cell of a particular species are always constant, in most cells of the body (with the exception of reproductive cells and others such as the liver). This is a characteristic of each specie, in humans such as the number of chromosomes is 46.