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Chromosome

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Definition

Chromosomes are threadlike structures made of proteins and nucleic acids. They are found in the nucleus of eukaryotic cells and carry genetic information along their length in the form of genes. In the early 1900s, Walter Sutton and Theodor Boveri argued that the understanding of chromosomes was consistent with Mendelian genetics, and the result of their thinking is called

the chromosome theory of heredity. A part of that theory is that Mendelian genes have specific locations (or loci) on chromosomes - a topic under heavy research since that time.

Chromosomes differ in overall length and the length of their parts, and they have distinctive banding patterns that allow them to be recognized. Humans have 23 pairs or 46 chromosomes. Of those 23 pairs, one pair is called the sex chromosomes, and the remaining 22 pairs are called autosomes.

Cross-References

- ▶ [Deoxyribonucleic Acid \(DNA\)](#)
- ▶ [Gene](#)