DNA and X and Y Chromosomes [1]

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DNA partly constitutes a Y-chromosome. Image shows different parts of an animal cell, revealing the nucleus within. A red box around a portion of the nucleus indicates that the chromosomes exist in the nucleus.

Y-chromosomes exist in the body cells of many kinds of male animals. Found in the nucleus of most living animal cells, these chromosomes pair with an X-chromosome to make a diploid cell. In females, this pairing results in the expression of both the X chromosome and the Y chromosome. In males, the pairing results in expression of both the X chromosome and the Y chromosome, but typically the Y chromosome contains fewer genes than the X chromosome, and thus the male cells often do not express all the genes on the Y chromosome. Zygotes with Y-chromosomes but mutated SRY genes can develop into adult organisms that have female traits.

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- Sex chromosomes
- Chromosomes
- Sex chromatin
- Sex differentiation
- Chromosome theory
- Cell nuclei
- Human chromosomes
- Genetics
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Topic
- Theories
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