

# Types of inheritance

## Monogenic inheritance

**Monogenic inheritance** is a type of inheritance conditioned by **one gene**.

### Autosomal inheritance

These types of inheritance are determined by genes stored on **autosomes** (asexual chromosomes). On the basis of allelic interactions we distinguish:

- Autosomal recessive inheritance
- Autosomal dominant inheritance

### Gonosomal inheritance

These types of inheritance are determined by genes stored on **gonosomes** (sex chromosomes).

- Gonosomal inheritance

On the basis of allelic interactions we distinguish:

- Gonosomal recessive inheritance
- Gonosomal dominant inheritance

According to the specific sex chromosome we distinguish:

- X-linked inheritance
- Y-linked inheritance

### Extranuclear heredity

Refers to genes located **outside the nuclear genome** of a cell. Subscribe to DeepL Pro to edit this document. Visit [www.DeepL.com/profor](http://www.DeepL.com/profor) more information.

- Extranuclear heredity

In the context of human genetics, we think in terms of the following:

- Mitochondrial inheritance

## Polygenic and multifactorial inheritance

These types of inheritance are determined by **multiple genes** (polygenic inheritance). **External environmental factors** may also contribute to the final form of the phenotype (multifactorial inheritance).

- Polygenic inheritance
- Multifactorial inheritance

## Links

### Related articles

- Mendel's Laws
- Allelic interactions
- Nemendelian inheritance

### References used

- THOMPSON, James Scott – THOMPSON, Margaret Wilson – NUSSBAUM, Robert L, et al. *Klinická genetika: Thompson & Thompson*. 6. edition. Prague : Triton, 2004. pp. 426. ISBN 80-7254-475-6.