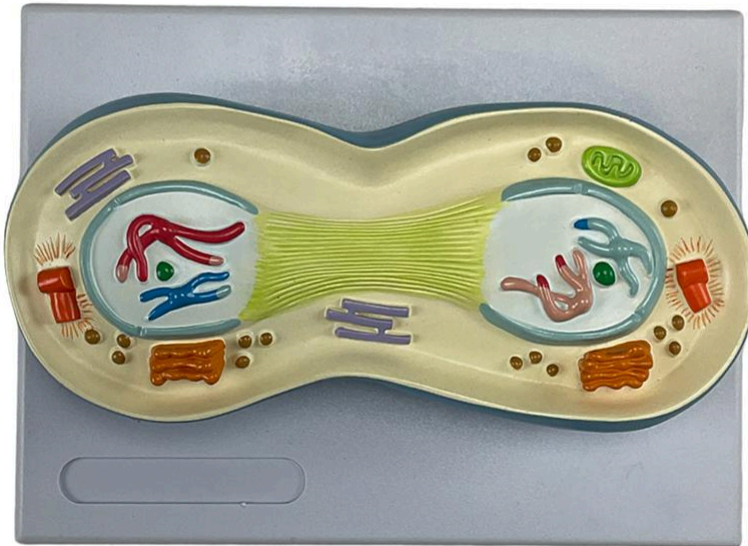




## MG29412 | MEIOSIS, 12 PARTS



















This detailed anatomical model shows the 12 stages of meiosis in a mammalian cell, allowing visualization of the various cellular structures at each stage of the process. Each piece is numbered, making it easy to follow the correct sequence of meiosis stages and identify the structures. The model is mounted on a base for better visualization and handling.

#### **Applications:**

Ideal for the study and teaching of meiosis in biology, cytology, genetics and related courses. Suitable for undergraduate and postgraduate students, as well as for training and demonstrations in laboratories and classrooms. Allows visual understanding of complex cellular processes.

#### **Technical Features:**

- \* Detailed representation of the stages of meiosis;
- \* Numbering on each piece to indicate the sequence of stages;
- \* High-precision natural molding;
- \* Manufactured from stable and durable synthetic material;



- \* Hand-painted;
- \* Includes an information card with related structures;
- \* Resin approved in toxicological tests;
- \* Precise replicas;
- \* Presented in 12 parts;
- \* 10,000 times enlarged scale;
- \* Polymer base for support.

### **3D Technology and Augmented Reality:**

Our anatomical models offer a visual complement through information cards that activate 3D models viewable in augmented reality (AR). This interactive platform aids learning, allowing comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology and pathophysiology.

### **Technical Specifications:**

- \* Material: Resin
- \* Scale: 10,000x

### **Main Structures:**

**nucleolus:** The nucleolus is a dense, non-membranous region located inside the cell nucleus. It is the site of ribosome synthesis, structures essential for protein synthesis.

**chromosome:** Chromosomes are filamentous structures composed of DNA and proteins, which carry the cell's genetic information. During meiosis, chromosomes are duplicated and undergo segregation to form gametes.

**mitochondria:** Mitochondria are organelles responsible for energy production in the cell, through cellular respiration. They have their own DNA and are considered the "powerhouses" of the cell.

**nuclear membrane:** The nuclear membrane, or nuclear envelope, is a double membrane that surrounds the cell nucleus, separating it from the cytoplasm. It has pores that allow the transport of molecules between the nucleus and the cytoplasm.

**Golgi complex:** The Golgi complex, or Golgi apparatus, is an organelle responsible for the processing, modification and transport of proteins and lipids. It plays a crucial role in cellular secretion.



**centriole:** Centrioles are cylindrical structures composed of microtubules, which play an important role in the organization of the cytoskeleton and in the formation of the mitotic spindle during cell division.

**endoplasmic reticulum:** The endoplasmic reticulum is an extensive network of membranes that extends throughout the cytoplasm. It participates in the synthesis of proteins and lipids and in the transport of substances within the cell. There are two types: rough endoplasmic reticulum (with ribosomes) and smooth (without ribosomes).

**vesicle:** Vesicles are small membranous sacs that transport substances within the cell. They act in the transport of proteins, lipids and other molecules between different organelles.

**Interphase:** Interphase is the period of the cell cycle that precedes meiosis. In this phase, the cell grows, replicates its DNA and prepares for division. Interphase is divided into three stages: G1, S and G2.

Other structures can be verified directly on the physical piece or on the interactive 3D model.

#### **About the Anatomical Models:**

They are developed with resin replication technology, meeting the demand for anatomical pieces for teaching and research. They present the essential morphological characteristics with excellent cost-benefit, good resistance, manual painting and numbering for precise identification of structures.

#### **List of all visible structures:**

- nucleolus
- chromosome
- mitochondrion
- nuclear membrane
- Golgi complex
- centriole
- endoplasmic reticulum
- vesicle
- Interphase