



## **MG21698 | ANIMAL CELL, 20,000 TIMES ENLARGED**



*Nasco*  
HEALTHCARE





A detailed representation of a eukaryotic cell, ideal for the study of cytology. The model features numerous organelles and cellular structures, meticulously numbered and hand-painted, mounted on a polymer base for easy viewing and handling.

#### **Applications:**

Ideal for the study of cytology, teaching cell biology, laboratory training, and classroom demonstrations. Suitable for students of biology, medicine, nursing, and related fields. Excellent tool for understanding the structure and function of cellular organelles.

#### **Features:**

- \* Detailed representation of a eukaryotic cell magnified 20,000 times.
- \* Numbered and hand-painted for easy identification of structures.
- \* Made of resin, approved in toxicological tests, ensuring stability and durability.
- \* High-fidelity molding to real structures.
- \* Includes an information card with related structures.
- \* Model mounted on a polymer base with support.

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

Our anatomical models offer a visual complement through information cards that activate

3D  
Call Us: 1-833-627-2642 | E-mail: [customer care@nascohealthcare.com](mailto:customer care@nascohealthcare.com) | Website: <https://shop.nascohealthcare.com/>



models viewable in augmented reality (AR). This interactive platform assists the learning process, allowing for comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology, and pathophysiology.

**Technical Specifications:**

\* Material: Resin.

\* Scale: 20,000 times natural size.

**Main Structures:**

**Mitochondria:** Cell organelle responsible for energy production in the form of ATP (adenosine triphosphate) through the process of cellular respiration. It has an outer membrane and a folded inner membrane, forming cristae, where the reactions of the electron transport chain occur.

**Rough Endoplasmic Reticulum (RER):** Network of interconnected membranes covered with ribosomes, responsible for the synthesis and modification of proteins. The synthesized proteins are often destined for secretion or the plasma membrane.

**Nucleolus:** Region within the cell nucleus, responsible for the biogenesis of ribosomes. It is rich in ribosomal RNA (rRNA) and proteins.

**Chromatin:** The cell's genetic material, composed of DNA and proteins. It appears as thin, uncondensed filaments during interphase, condensing into chromosomes during cell division.

**Smooth Endoplasmic Reticulum (SER):** Network of interconnected membranes devoid of ribosomes, involved in various functions, including lipid synthesis, carbohydrate metabolism, and detoxification.

**Cytoplasm:** Gelatinous material that fills the interior of the cell, excluding the nucleus. It contains various organelles and cellular structures, and is the site where many metabolic reactions occur.

**Secretory Granules:** Vesicles that store and transport substances for secretion by the cell. Their contents are released by exocytosis.

**Centrosome:** Region near the nucleus, responsible for the organization of microtubules and the formation of the mitotic spindle during cell division.

**Nuclear Membrane:** Double membrane that surrounds the nucleus, separating it from the cytoplasm. It has nuclear pores that allow the transport of molecules between the nucleus



and the cytoplasm.

**Nucleus:** Organelle that contains most of the cell's genetic material, DNA. It is the control center of cellular activities.

**Lipid Droplets:** Droplets of fat stored in the cell cytoplasm, serving as an energy reserve.

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

**About the Anatomical Models:**

They are developed with resin replication technology, offering an alternative for teaching and research. They present the main morphological characteristics with a good cost-benefit ratio, resistance, hand painting, and numbering for precise identification of structures.

**List of all visible structures:**

- Mitochondrion
- Rough endoplasmic reticulum (ER)
- Nucleolus
- Chromatin
- Smooth endoplasmic reticulum (ER)
- Cytoplasm
- Mitochondrion
- Secretory granules
- Centrosome
- Nuclear membrane
- Nucleus
- Lipid droplets
- Golgi complex