MG21703 | PLANT CELL, 20,000 TIMES ENLARGED

8
7
6
17

6
8
7

Nasco
HEALTHCARE

This detailed model represents a plant cell enlarged 20,000 times, accurately displaying the main organelles and cellular structures, including those unique to plant cells, such as the cell wall and different types of plastids. The model is meticulously numbered and hand-painted, facilitating the identification and study of the various structures.

Applications:

Ideal for teaching and research in cell biology and botany, this model is suitable for students, teachers, and researchers seeking an accurate and detailed representation of a plant cell. It is useful for studying cellular structures, their functions, and the differences between plant and animal cells.

Technical Advantages:

* Detailed representation of cellular structures;
* Numbered and hand-painted for easy identification;
* Manufactured from resin approved in toxicological tests;
* Stable and durable synthetic material;
* Includes an information card with related structures;

* Includes references and markings for better understanding.

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 assists learning, allowing for the comparative analysis of anatomical structures and offering resources for education in anatomy, physiology, and pathophysiology.

Technical Specifications:

* Scale: 20,000x
* Material: Synthetic resin

Main Structures:

Chromoplast: Plastid responsible for the synthesis and storage of carotenoid pigments, which give yellow, orange, and red colors to flowers, fruits, and roots.

Cell wall: Rigid structure external to the plasma membrane, composed mainly of cellulose, which provides protection, support, and shape to the plant cell.

Nuclear membrane: Double membrane that delimits the nucleus, regulating the transport of substances between the nucleus and the cytoplasm.

Nucleolus: Region within the nucleus responsible for ribosome synthesis.

Nucleus: Organelle delimited by the nuclear membrane, containing the cell's genetic material (DNA).

Vacuole: Large, membranous organelle that performs various functions, including the storage of water, nutrients, and reserve substances, in addition to contributing to the regulation of osmotic pressure.

Leucoplast: Colorless plastid responsible for the storage of starch, proteins, or lipids.

Mitochondrion: Organelle responsible for cellular respiration, generating most of the cell's energy (ATP).

Golgi apparatus: Organelle responsible for the processing, modification, classification, and

transport of proteins and lipids.

Chloroplast: Plastid containing chlorophyll, responsible for photosynthesis, the process that converts light energy into chemical energy.

Endoplasmic reticulum: Network of interconnected membranes that participate in the synthesis of proteins and lipids, as well as the transport of substances within the cell.

Primary pit and plasmodesma: Channels that cross the cell wall, connecting the cytoplasm of adjacent cells, allowing communication and the transport of substances between them.

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

About Anatomical Models:

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

List of all visible structures:

- Chromoplast
- Cell wall
- Nuclear membrane
- Nucleolus
- Nucleus
- Vacuole
- Leucoplast
- Mitochondrion
- Golgi apparatus
- Chloroplast
- Endoplasmic reticulum
- Primary pit and plasmodesma