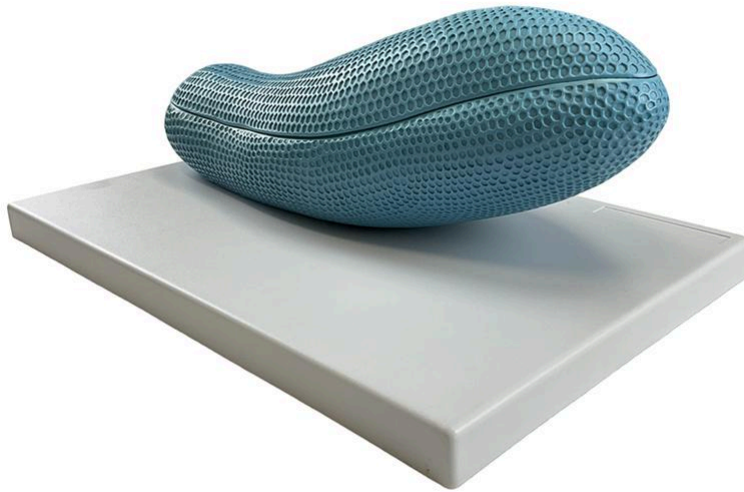




MG15179 | PARAMECIO, 2 PARTS





Two-Part Paramecium Anatomical Model: An enlarged model revealing the internal morphology of this protozoan through a longitudinal section, showing details of its organelles.

Applications:

Ideal for the study and teaching of cell biology, cytology, and protozoology in schools, universities, and research institutions. Indicated for training and demonstration of the structure of a paramecium. Allows for the comparative analysis of cellular structures.

Technical Advantages:

- * Detailed representation of internal organelles.
- * All structures are numbered and identified.
- * High-precision natural molding.
- * Manufactured from stable synthetic material and resin approved in toxicological tests.
- * Hand-painted replicas with didactic colors.
- * Includes an information card with the 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



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: Enlarged several times the natural size.

* Material: Synthetic resin.

Main Structures:

Cytoplasm: The cytoplasm is the inner region of the paramecium, filled with a gelatinous cytosol where various cellular organelles are found. It is the site where most metabolic reactions occur.

Cytopharynx: The cytopharynx is a funnel-shaped structure that extends into the cytoplasm, responsible for the ingestion of food particles.

Food Particles: Represent the food ingested by the paramecium, which may consist of bacteria, algae, or other microorganisms.

Food Vacuole: These are membranous vesicles that form from the cytopharynx and contain food particles. Inside the vacuole, digestion occurs through the action of lysosomal enzymes.

Lysosome: Membranous organelles that contain digestive enzymes responsible for breaking down organic molecules in the food vacuole.

Macronucleus: The macronucleus is the larger nucleus of the paramecium, responsible for controlling the cell's metabolic functions and gene expression.

Micronucleus: The micronucleus is a smaller nucleus, involved in the processes of sexual reproduction (conjugation) of the paramecium.

Contractile Vacuole: Structure responsible for osmoregulation, i.e., the regulation of the cell's water balance, eliminating excess water.

Collecting Canal: Channels that collect excess water from the cytoplasm and direct it to the contractile vacuole.

Cytoproct: Region of the cell membrane where the elimination of waste products from digestion occurs. 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 a competitive cost-benefit ratio, good resistance, hand painting, and numbering for precise identification of structures.

List of all visible structures:

- Cytotome
- Cytopharynx
- Food particles
- Food vacuole
- Lysosome
- Macronucleus
- Micronucleus
- Contractile vacuole
- Collecting duct
- Cytoproct